



NASA SP-7039 (07)

Section 2
Indexes

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**PATENT
ABSTRACTS
BIBLIOGRAPHY**

A CONTINUING BIBLIOGRAPHY

Section 2 • Indexes

JULY 1975

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

ACCESSION NUMBER RANGES

<i>Bibliography Number</i>	<i>STAR Accession Numbers</i>
NASA SP-7039(04)	N69-20701—N73-33931
NASA SP-7039(05)	N74-10001—N74-21629
NASA SP-7039(06)	N74-21630—N74-35363
NASA SP-7039(07)	N75-10001—N75-21218

NASA

**PATENT
ABSTRACTS
BIBLIOGRAPHY**

A CONTINUING BIBLIOGRAPHY

Section 2 • Indexes

Indexes for the annotated references to NASA-owned inventions covered by U.S. patents and applications for patent that were announced in *Scientific and Technical Aerospace Reports (STAR)* between May 1969 and June 1975. This issue supersedes all previous Index Sections.



Scientific and Technical Information Office

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

JULY 1975
Washington, D.C.

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INTRODUCTION

Several thousand inventions result each year from the aeronautical and space research supported by the National Aeronautics and Space Administration. The inventions having important use in government programs or significant commercial potential are usually patented by NASA. These inventions cover practically all fields of technology and include many that have useful and valuable commercial application.

NASA inventions best serve the interests of the United States when their benefits are available to the public. In many instances, the granting of nonexclusive or exclusive licenses for the practice of these inventions may assist in the accomplishment of this objective. This bibliography is published as a service to companies, firms, and individuals seeking new, licensable products for the commercial market.

The *NASA Patent Abstracts Bibliography (NASA PAB)* is a semiannual NASA publication containing comprehensive abstracts and indexes of NASA-owned inventions covered by U.S. patents and applications for patent. The citations included in *NASA PAB* were originally published in NASA's *Scientific and Technical Aerospace Reports (STAR)* and cover *STAR* announcements made since May 1969.

For the convenience of the user, each issue of *NASA PAB* has a separately bound Abstract Section (Section 1) and Index Section (Section 2). Although each Abstract Section covers only the indicated six-month period, the Index Section is cumulative covering all NASA-owned inventions announced in *STAR* since May 1969. Thus a complete set of *NASA PAB* would consist of the Abstract Section of Issue 04 (January 1974), the Abstract Section for all subsequent issues, and the Index Section for the most recent issue.

The 158 citations published in this issue of the Abstract Section cover the period January 1975 through June 1975. The Index Section contains references to the 2830 citations covering the period May 1969 through June 1975.

ABSTRACT SECTION (SECTION 1)

This *PAB* issue incorporates the 1975 *STAR* category revisions which include 10 major subdivisions divided into 74 specific categories and one general category/division. (See Table of Contents for the scope note of each category under which are grouped appropriate NASA inventions.) This new scheme was devised in lieu of the 34 category divisions which were utilized in *PAB* supplements (01) through (06) covering *STAR* abstracts from May 1969 through January 1974. Each entry in the Abstract Section consists of a *STAR* citation accompanied by an abstract and a key illustration taken from the patent or application for patent drawing. Entries are arranged in subject category in order of the ascending NASA Accession Number originally assigned in *STAR* to the invention. The range of NASA Accession Numbers within each issue is printed on the inside front cover.

Abstract Citation Data Elements: Each of the abstract citations has several data elements useful for identification and indexing purposes, as follows:

NASA Accession Number

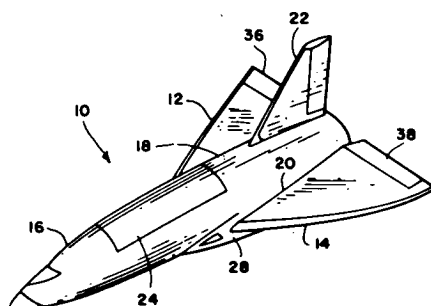
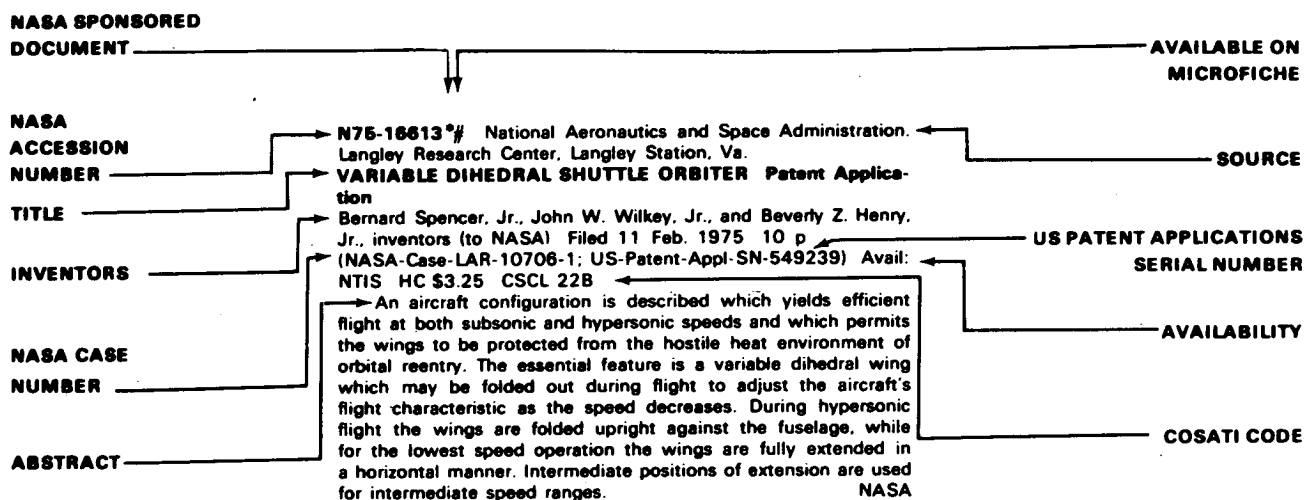
NASA Case Number

Inventor's Name

Title of Invention
 U.S. Patent Application Serial Number
 U.S. Patent Number (for issued patents only)
 U.S. Patent Office Classification Number(s)
 (for issued patents only)

These date elements appear in the citation of the abstract as depicted in the Typical Citation and Abstract reproduced below and are also used in the several indexes.

TYPICAL CITATION AND ABSTRACT FROM PATENT ABSTRACTS BIBLIOGRAPHY



**KEY
 ILLUSTRATION**

INDEX SECTION (SECTION 2)

The Index Section is divided into five indexes which are cross-indexed and are useful in locating a single invention or groups of inventions.

Each of the five indexes utilizes basic data elements: (1) Subject Category Number, (2) NASA Accession Number, and (3) NASA Case Number, in addition to other specific index terms.

Subject Index: Lists all inventions according to appropriate alphabetized technical term and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Inventor Index: Lists all inventions according to alphabetized names of inventors and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Source Index: Lists all inventions according to alphabetized source of invention (i.e., name of contractor or government installation where invention was made) and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Number Index: Lists inventions in order of ascending (1) NASA Case Number, (2) U.S. Patent Application Serial Number, (3) U.S. Patent Classification Number, and (4) U.S. Patent Number and indicates the related Subject Category Number and the NASA Accession Number.

Accession Number Index: Lists all inventions in order of ascending NASA Accession Number and indicates the related Subject Category Number, the NASA Case Number, the U.S. Patent Application Serial Number, the U.S. Patent Classification Number, and the U.S. Patent Number.

HOW TO USE THIS PUBLICATION TO IDENTIFY NASA INVENTIONS

To identify one or more NASA inventions within a specific technical field or subject, several techniques are possible when using the flexibility incorporated into the *NASA PAB*.

(1) *Using Subject Category:* To identify all NASA inventions in any one of the subject categories in this issue of *NASA PAB*, select the desired Subject Category in the Abstract Section (Section 1) and find the inventions abstracted thereunder. For previous *NASA PAB* issues, the Table of Contents to Section 1 should be examined as the subject categories were changed beginning with *NASA PAB(07)*.

(2) *Using Subject Index:* To identify all NASA inventions listed under a desired technical subject index term, (A) turn to the cumulative Subject Index in the Index Section and find the invention(s) listed under the desired technical subject term. (B) Note the indicated

Accession Number and the Subject Category Number. (C) Using the indicated Accession Number, turn to the inside front cover of the Index Section to determine which issue of the Abstract Section includes the Accession Number desired. (D) To find the abstract of the particular invention in the issue of the Abstract Section selected, (i) use the Subject Category Number to locate the Subject Category and (ii) use the Accession Number to locate the desired invention within the Subject Category listing.

(3) *Using Patent Classification Index:* To identify all inventions covered by issued NASA patents (does not include applications for patent) within a desired Patent Office Classification, (A) turn to the Patent Classification Number in the Number Index of Section 2 and find the associated invention(s) and (B) follow the instructions outlined in (2)(B), and (D) above.

PUBLIC AVAILABILITY OF COPIES OF PATENTS AND PATENT APPLICATIONS

Copies of U.S. patents may be purchased directly from the U.S. Patent Office, Washington, D.C. 20231, for fifty cents a copy.

Copies of pending NASA applications for patent abstracted in *NASA PAB* are sold by the National Technical Information Service. Springfield, Virginia 22161, at the price shown in the citation. Microfiche are sold at the established unit price of \$2.25. When ordering copies of an application for patent from NTIS, the U.S. Patent Application Serial Number listed in the index or shown in the citation for each abstract should be used to identify the desired application for patent.

LICENSES FOR COMMERCIAL USE: INQUIRIES AND APPLICATIONS FOR LICENSE

NASA inventions, abstracted in *NASA PAB*, are available for nonexclusive or exclusive licensing in accordance with the NASA Patent Licensing Regulations. It is significant that all licenses for NASA inventions shall be by express written instruments and that no license will be granted or implied in a NASA invention except as provided in the NASA Patent Licensing Regulations.

Inquiries concerning the NASA Patent Licensing Program or the availability of licenses for the commercial use of NASA-owned inventions covered by U.S. patents or pending applications for patent should be forwarded to the NASA Patent Counsel of the NASA installation having cognizance of the specific invention, or the Assistant General Counsel for Patent Matters, Code GP, National Aeronautics and Space Administration, Washington, D.C. 20546. Inquiries should refer to the NASA Case Number, the Title of the Invention, and the U.S. Patent Number or the U.S. Application Serial Number assigned to the invention as shown in *NASA PAB*.

The NASA Patent Counsel having cognizance of the invention is determined by the first three letters or prefix of the NASA Case Number assigned to the invention. The addresses of NASA Patent Counsels are listed alongside the NASA Case Number prefix letters in the following table. Formal application of license must be submitted on the NASA Form, Application for NASA Patent License, which is available upon request from any NASA Patent Counsel.

**NASA Case
Number Pre-
fix Letters**

**ARC-xxxxx
XAR-xxxxx**

**ERC-xxxxx
XER-xxxxx
HQN-xxxxx
XHQ-xxxxx**

**GSC-xxxxx
XGS-xxxxx**

**KSC-xxxxx
XKS-xxxxx**

**LAR-xxxxx
XLA-xxxxx**

**LEW-xxxxx
XLE-xxxxx**

**MSC-xxxxx
XMS-xxxxx**

**MFS-xxxxx
XMF-xxxxx**

**NPO-xxxxx
XNP-xxxxx
FRC-xxxxx
XFR-xxxxx
WOO-xxxxx**

**Address of Cognizant
NASA Patent Counsel**

**Ames Research Center
Mail Code: 200-11A
Moffett Field, California 94035
Telephone: (415)965-5104**

**NASA Headquarters
Mail Code: GP
Washington, D.C. 20546
Telephone: (202)755-3954**

**Goddard Space Flight Center
Mail Code: 204
Greenbelt, Maryland 20771
Telephone: (301)982-2351**

**John F. Kennedy Space Center
Mail Code: AA-PAT
Kennedy Space Center, Florida 32899
Telephone: (305)867-2544**

**Langley Research Center
Mail Code: 456
Langley Station
Hampton, Virginia 23365
Telephone: (804)827-3725**

**Lewis Research Center
Mail Code: 500-113
21000 Brookpark Road
Cleveland, Ohio 44135
Telephone: (216)433-6346**

**Lyndon B. Johnson Space Center
Mail Code: AM
Houston, Texas 77058
Telephone: (713)483-4871**

**George C. Marshall Space Flight Center
Mail Code: CCO1
Huntsville, Alabama 35812
Telephone: (205)453-0020**

**NASA Pasadena Office
Mail Code: 180-601
4800 Oak Grove Drive
Pasadena, California 91103
Telephone: (213)354-2700**

PATENT LICENSING REGULATIONS

Title 14—AERONAUTICS AND SPACE

Chapter V—National Aeronautics and Space Administration

PART 1245—PATENTS

Subpart 2—Patent Licensing Regulations

1. Subpart 2 is revised in its entirety as follows:

Sec.	
1245.200	Scope of subpart.
1245.201	Definitions.
1245.202	Basic considerations.
1245.203	Licenses for practical application of inventions.
1245.204	Other licenses.
1245.205	Publication of NASA inventions available for license.
1245.206	Application for nonexclusive license.
1245.207	Application for exclusive license.
1245.208	Processing applications for license.
1245.209	Royalties and fees.
1245.210	Reports.
1245.211	Revocation of licenses.
1245.212	Appeals.
1245.213	Litigation.
1245.214	Address of communications.

AUTHORITY: The provisions of this Subpart 2 issued under 42 U.S.C. 2457, 2473(b) (3).

§ 1245.200 Scope of subpart.

This Subpart 2 prescribes the terms, conditions, and procedures for licensing inventions covered by U.S. patents and patent applications for which the Administrator of the National Aeronautics and Space Administration holds title on behalf of the United States.

§ 1245.201 Definitions.

For the purpose of this subpart, the following definitions apply:

(a) "Invention" means an invention covered by a U.S. patent or patent application for which the Administrator of NASA holds title on behalf of the United States and which is designated by the Administration as appropriate for the grant of license(s) in accordance with this subpart.

(b) "To practice an invention" means to make or have made, use or have used, sell or have sold, or otherwise dispose of according to law any machine, article of manufacture or composition of matter physically embodying the invention, or to use or have used the process or method comprising the invention.

(c) "Practical application" means the manufacture in the case of a composition of matter or product, the use in the case of a process, or the operation in the case of a machine, under such conditions as to establish that the invention is being utilized and that its benefits are reasonably accessible to the public.

(d) "Special invention" means any invention designated by the NASA Assistant General Counsel for Patent Matters to be subject to short-form licensing procedures. An invention may be designated as a special invention when a determination is made that:

(1) Practical application has occurred and is likely to continue for the life of

the patent and for which an exclusive license is not in force, or

(2) The public interest would be served by the expeditious granting of a nonexclusive license for practice of the invention by the public.

(e) The "Administrator" means the Administrator of the National Aeronautics and Space Administration, or his designee.

(f) "Government" means the Government of the United States of America.

(g) The "Inventions and Contributions Board" means the NASA Inventions and Contributions Board established by the Administrator of NASA within the Administration in accordance with section 305 of the National Aeronautics and Space Act of 1958 as amended (42 U.S.C. 2457).

§ 1245.202 Basic considerations.

(a) Much of the new technology resulting from NASA sponsored research and development in aeronautical and space activities has application in other fields. NASA has special authority and responsibility under the National Aeronautics and Space Act of 1958, as amended (42 U.S.C. 2451), to provide for the widest practical dissemination and utilization of this new technology. In addition, NASA has been given unique requirements to protect the inventions resulting from NASA activities and to promulgate licensing regulations to encourage commercial use of these inventions.

(b) NASA-owned inventions will best serve the interests of the United States when they are brought to practical application in the shortest time possible. Although NASA encourages the nonexclusive licensing of its inventions to promote competition and achieve their widest possible utilization, the commercial development of certain inventions calls for a substantial capital investment which private manufacturers may be unwilling to risk under a nonexclusive license. It is the policy of NASA to seek exclusive licensees when such licenses will provide the necessary incentive to the licensee to achieve early practical application of the invention.

(c) The Administrator, in determining whether to grant an exclusive license, will evaluate all relevant information submitted by applicants and all other persons and will consider the necessity for further technical and market development of the invention, the capabilities of prospective licensees, their proposed plans to undertake the required investment and development, the impact on competitors, and the benefits of the license to the Government and to the public. Preference for exclusive license shall be given to U.S. citizens or companies who intend to manufacture or use, in the case of a process, the invention in the United States of America, its territories and possessions. Consideration may also be given to assisting small businesses and minority business enterprises, as well as economically depressed, low income and labor surplus areas.

(d) All licenses for inventions shall

be by express written instruments. No license shall be granted either expressly or by implication, for a NASA invention except as provided for in §§ 1245.203 and 1245.204 and in any existing or future treaty or agreement between the United States and any foreign government.

(e) Licenses for inventions covered by NASA-owned foreign patents and patent applications shall be granted in accordance with the NASA Foreign Patent Licensing Regulations (§ 1245.4).

§ 1245.203 Licenses for practical application of inventions.

(a) *General.* As an incentive to encourage practical application of inventions, licenses will be granted to responsible applicants according to the circumstances and conditions set forth in this section.

(b) *Nonexclusive licenses.* (1) Each invention will be made available to responsible applicants for nonexclusive, revocable licensing in accordance with § 1245.206, consistent with the provisions of any existing exclusive license.

(2) The duration of the license shall be for a period as specified in the license.

(3) The license shall require the licensee to achieve the practical application of the invention and to then practice the invention for the duration of the license.

(4) The license may be granted for all or less than all fields of use of the invention and throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(5) The license shall extend to the subsidiaries and affiliates of the licensee and shall be nonassignable without approval of the Administrator, NASA, except to the successor of that part of the licensee's business to which the invention pertains.

(c) *Short-form nonexclusive licenses.* A nonexclusive, revocable license for a special invention, as defined in § 1245.201 (d), shall be granted upon written request, to any applicant by the Patent Counsel of the NASA installation having cognizance of the invention.

(d) *Exclusive licenses.* (1) A limited exclusive license may be granted on an invention available for such licensing provided that:

(i) The Administrator has determined that: (a) The invention has not been brought to practical application by a nonexclusive licensee in the fields of use or in the geographical locations covered by the application for the exclusive license, (b) practical application of the invention in the fields of use or geographical locations covered by the application for the exclusive license is not likely to be achieved expeditiously by the further funding of the invention by the Government or under a nonexclusive license requested by any applicant pursuant to these regulations, and (c) the exclusive license will provide the necessary incentive to the licensee to achieve the practical application of the invention; and

(ii) Either a notice pursuant to

PATENT LICENSING REGULATIONS

§ 1245.205 listing the invention as available for licensing has been published in the FEDERAL REGISTER for at least 9 months; or a patent covering the invention has been issued for at least 6 months. However, a limited exclusive license may be granted prior to the periods specified above if the Administrator determines that the public interest will best be served by the earlier grant of an exclusive license.

(2) The license may be granted for all or less than all fields of use of the invention, and throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(3) The exclusive period of the license shall be negotiated, but shall be for less than the terminal portion of the patent, and shall be related to the period necessary to provide a reasonable incentive to invest the necessary risk capital.

(4) The license shall require the licensee to practice the invention within a period specified in the license and then to achieve practical application of the invention.

(5) The license shall require the licensee to expend a specified minimum sum of money and/or to take other specified actions, within indicated period(s) after the effective date of the license, in an effort to achieve practical application of the invention.

(6) The license shall be subject to at least an irrevocable royalty-free right of the Government of the United States to practice and have practiced the invention throughout the world by or on behalf of the Government of the United States and on behalf of any foreign government pursuant to any existing or future treaty or agreement with the United States.

(7) The license may reserve to the Administrator, NASA, under the following circumstances, the right to require the granting of a sublicense to responsible applicant(s) on terms that are considered reasonable by the Administrator, taking into consideration the current royalty rates under similar patents and other pertinent facts: (i) To the extent that the invention is required for public use by Government regulation, or (ii) as may be necessary to fulfill health or safety needs, or (iii) for other purposes stipulated in the license.

(8) The license shall be nontransferable except to the successor of that part of the licensee's business to which the invention pertains.

(9) Subject to the approval of the Administrator, the licensee may grant sublicenses under the license. Each sublicense granted by an exclusive licensee shall make reference to and shall provide that the sublicense is subject to the terms of the exclusive license including the rights retained by the Government under the exclusive license. A copy of each sublicense shall be furnished to the Administrator.

(10) The license may be subject to such other reservations as may be in the public interest.

§ 1245.204 Other licenses.

(a) *License to contractor.* There is

hereby granted to the contractor reporting an invention made in the performance of work under a contract of NASA in the manner specified in section 305(a) (1) or (2) of the National Aeronautics and Space Act of 1958 as amended (42 U.S.C. 2457(a) (1) or (2)), a revocable, nonexclusive, royalty-free license for the practice of such invention, together with the right to grant sublicenses of the same scope to the extent the contractor was legally obligated to do so at the time the contract was awarded. Such license and right is nontransferable except to the successor of that part of the contractor's business to which the invention pertains.

(b) *Miscellaneous licenses.* Subject to any outstanding licenses, nothing in this subpart 2 shall preclude the Administrator from granting other licenses for inventions, when he determines that do so would provide for an equitable distribution of rights. The following exemplify circumstances wherein such licenses may be granted:

(1) In consideration of the settlement of an interference;

(2) In consideration of a release of a claim of infringement; or

(3) In exchange for or as part of the consideration for a license under adversely held patent(s).

§ 1245.205 Publication of NASA inventions available for license.

(a) A notice will be periodically published in the FEDERAL REGISTER listing inventions available for licensing. Abstracts of the inventions will also be published in the NASA Scientific and Technical Aerospace Reports (STAR) and other NASA publications.

(b) Copies of pending patent applications for inventions abstracted in STAR may be purchased from the National Technical Information Service, Springfield, Va. 22151.

§ 1245.206 Application for nonexclusive license.

(a) *Submission of application.* An application for nonexclusive license under § 1245.203(b) or a short-form nonexclusive license for special inventions under § 1245.203(c) shall be addressed to the NASA Patent Counsel of the NASA installation having cognizance over the NASA invention for which a license is desired or to the NASA Assistant General Counsel for Patent Matters.

(b) *Contents of an application for nonexclusive license.* An application for nonexclusive license under § 1245.203(b) shall include:

(1) Identification of invention for which license is desired, including the NASA patent case number, patent application serial number of patent number, title and date, if known;

(2) Name and address of the person, company or organization applying for license and whether the applicant is a U.S. citizen or a U.S. corporation;

(3) Name and address of representative of applicant to whom correspondence should be sent;

(4) Nature and type of applicant's business;

(5) Number of employees;

(6) Purpose for which license is desired;

(7) A statement that contains the applicant's best knowledge of the extent to which the invention is being practiced by private industry and the Government;

(8) A description of applicant's capability and plan to undertake the development and marketing required to achieve the practical application of the invention, including the geographical location where the applicant plans to manufacture or use, in the case of a process, the invention; and

(9) A statement indicating the minimum term of years the applicant desires to be licensed.

(c) *Contents of an application for a short-form nonexclusive license.* An application for a short-form nonexclusive license under § 1245.203(c) for a special invention shall include:

(1) Identification of invention for which license is desired, including the NASA patent case number, patent application serial number or patent number, title and date, if known;

(2) Name and address of company or organization applying for license; and

(3) Name and address of representative of applicant to whom correspondence should be sent.

§ 1245.207 Application for exclusive license.

(a) *Submission of application.* An application for exclusive license under § 1245.203(d) may be submitted to NASA at any time. An application for exclusive license shall be addressed to the NASA Assistant General Counsel for Patent Matters.

(b) *Contents of an application for exclusive license.* In addition to the requirements set forth in § 1245.206(b), the application for an exclusive license shall include:

(1) Applicant's status, if any, in any one or more of the following categories:

(i) Small business firm;

(ii) Minority business enterprise;

(iii) Location in a surplus labor area;

(iv) Location in a low-income urban area; and

(v) Location in an area designed by the Government as economically depressed.

(2) A statement indicating the time, expenditure, and other acts which the applicant considers necessary to achieve practical application of the invention, and the applicant's offer to invest that sum and to perform such acts if the license is granted;

(3) A statement whether the applicant would be willing to accept a license for all or less than all fields of use of the invention throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(4) A statement indicating the amount of royalty fees or other consideration, if any, the applicant would be willing to pay the Government for the exclusive license; and

(5) Any other facts which the applicant believes to show it to be in the interests of the United States of America for the Administrator to grant an exclusive license rather than a nonexclusive li-

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cense and that such an exclusive license should be granted to the applicant.

§ 1245.208 Processing applications for license.

(a) *Initial review.* Applications for nonexclusive and exclusive licenses under §§ 1245.206 and 1245.207 will be reviewed by the Patent Counsel of the NASA installation having cognizance for the invention and the NASA Assistant General Counsel for Patent Matters, to determine the conformity and appropriateness of the application for license and the availability of the specific invention for the license requested. The Assistant General Counsel for Patent Matters will forward all applications for license conforming to §§ 1245.206(b) and 1245.207(b) to the NASA Inventions and Contributions Board when the invention is available for consideration of the requested license. Prior to forwarding applications for exclusive licenses to the Inventions and Contributions Board, notice in writing will be given to each nonexclusive licensee for the specific invention advising of the receipt of the application for the exclusive license and providing each nonexclusive licensee with a 30-day period for submitting either evidence that practical application of the invention has occurred or is about to occur or, an application for an exclusive license for the invention.

(b) *Recommendations of Inventions and Contributions Board.* The Inventions and Contributions Board shall, in accordance with the basic considerations set forth in §§ 1245.202 and 1245.203, evaluate all applications for license forwarded by the Assistant General Counsel for Patent Matters. Based upon the facts presented to the Inventions and Contributions Board in the application and any other facts in its possession, the Inventions and Contributions Board shall recommend to the Administrator: (1) Whether a nonexclusive or exclusive license should be granted, (2) the identity of the licensee, and (3) any special terms or conditions of the license.

(c) *Determination of Administrator and grant of nonexclusive licenses.* The Administrator shall review the recommendations of the Inventions and Contributions Board and shall determine whether to grant the nonexclusive license as recommended by the Board. If the Administrator determines to grant the license, the license will be granted upon the negotiation of the appropriate terms and conditions of the Office of General Counsel.

(d) *Determination of Administrator and grant of exclusive licenses—(1) Notice.* If the Administrator determines that the best interest of the United States will be served by the granting of an exclusive license in accordance with the basic considerations set forth in §§ 1245.202 and 1245.203, a notice shall be published in the FEDERAL REGISTER announcing the intent to grant the exclusive license, the identification of the invention, special terms or conditions of the proposed license, and a statement that NASA will grant the exclusive license unless within 30 days of the publication of such notice the Inventions and Contributions Board receives in writing

any of the following together with supporting documentation:

(i) A statement from any person setting forth reasons why it would not be in the best interest of the United States to grant the proposed exclusive license; or

(ii) An application for a nonexclusive license under such invention, in accordance with § 1245.206(b), in which applicant states that he has already brought or is likely to bring the invention to practical application within a reasonable period.

The Inventions and Contributions Board shall, upon receipt of a written request within the 30 days' notice period, grant an extension of 30 days for the submission of the documents designated above.

(2) *Recommendation of Inventions and Contributions Board.* Upon the expiration of the period required by subparagraph (1) of this paragraph, the Board shall review all written responses to the notice and shall then recommend to the Administrator whether to grant the exclusive license as the Board initially recommended or whether a different form of license, if any, should instead be granted.

(3) *Grant of exclusive licenses.* The Administrator shall review the Board's recommendation and shall determine if the interest of the United States would best be served by the grant of an exclusive license as recommended by the Board. If the Administrator determines to grant the exclusive license, the license will be granted upon the negotiation of the appropriate terms and conditions by the Office of General Counsel.

§ 1245.209 Royalties and fees.

(a) Normally, a nonexclusive license for the practical application of an invention granted to a U.S. citizen or company will not require the payment of royalties; however, NASA may require other consideration.

(b) An exclusive license for an invention may require the payment of royalties, fees or other consideration when the licensing circumstances and the basic considerations in § 1245.202, considered together, indicate that it is in the public interest to do so.

§ 1245.210 Reports.

A license shall require the licensee to submit periodic reports of his efforts to work the invention. The reports shall contain information within his knowledge, or which he may acquire under normal business practice, pertaining to the commercial use that is being made of the invention and such other information which the Administrator may determine pertinent to the licensing program and which is specified in the license.

§ 1245.211 Revocation of licenses.

(a) Any license granted pursuant to § 1245.203 may be revoked, either in part or in its entirety, by the Administrator if in his opinion the licensee at any time shall fail to use adequate efforts to bring to or achieve practical application of the invention in accordance with the terms of the license, or if the licensee at any

time shall default in making any report required by the license, or shall make any false report, or shall commit any breach of any covenant or agreement therein contained, and shall fail to remedy any such default, false report, or breach within 30 days after written notice, or if the patent is deemed unenforceable either by the Attorney General or a final decision of a U.S. court.

(b) Any license granted pursuant to § 1245.204(a) may be revoked, either in part or in its entirety, by the Administrator if in his opinion such revocation is necessary to achieve the earliest practical application of the invention pursuant to an application for exclusive license submitted in accordance with § 1245.207, or the licensee at any time shall breach any covenant or agreement contained in the license, and shall fail to remedy any such breach within 30 days after written notice thereof.

(c) Before revoking any license granted pursuant to this Subpart 2 for any cause, there will be furnished to the licensee a written notice of intention to revoke the license, and the licensee will be allowed 30 days after such notice in which to appeal and request a hearing before the Inventions and Contributions Board on the question of revocation. After a hearing, the Inventions and Contributions Board shall transmit to the Administrator the record of proceedings, its findings of fact, and its recommendation whether the license should be revoked either in part or in its entirety. The Administrator shall review the recommendation of the Board and determine whether to revoke the license in part or in its entirety. Revocation of a license shall include revocation of all sublicenses which have been granted.

§ 1245.212 Appeals.

Any person desiring to file an appeal pursuant to § 1245.211(c) shall address the appeal to Chairman, Inventions and Contributions Board. Any person filing an appeal shall be afforded an opportunity to be heard before the Inventions and Contributions Board, and to offer evidence in support of his appeal. The procedures to be followed in any such matter shall be determined by the Administrator. The Board shall make findings of fact and recommendations with respect to disposition of the appeal. The decision on the appeal shall be made by the Administrator, and such decision shall be final and conclusive, except on questions of law, unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

§ 1245.213 Litigation.

An exclusive licensee shall be granted the right to sue at his own expense any party who infringes the rights set forth in his license and covered by the licensed patent. The licensee may join the Government, upon consent of the Attorney General, as a party complainant in such suit, but without expense to the Government and the licensee shall pay costs and any final judgment or decree that may be rendered against the Govern-

PATENT LICENSING REGULATIONS

ment in such suit. The Government shall also have an absolute right to intervene in any such suit at its own expense. The licensee shall be obligated to promptly furnish to the Government, upon request, copies of all pleadings and other papers filed in any such suit and of evidence adduced in proceedings relating to the licensed patent including, but not limited to, negotiations for settlement and agreements settling claims by a licensee based on the licensed patent, and all other books, documents, papers, and

records pertaining to such suit. If, as a result of any such litigation, the patent shall be declared invalid, the licensee shall have the right to surrender his license and be relieved from any further obligation thereunder.

§ 1245.214 Address of communications

(a) Communications to the Assistant General Counsel for Patent Matters in accordance with §§ 1245.206 and 1245.207 and requests for information concerning licenses for NASA inventions should be

addressed to the Assistant General Counsel for Patent Matters, Code GP, National Aeronautics and Space Administration, Washington, D.C. 20546.

(b) Communications to the Inventions and Contributions Board in accordance with §§ 1245.208, 1245.211, and 1245.212 should be addressed to Chairman, Inventions and Contributions Board, National Aeronautics and Space Administration, Washington, D.C. 20546.

Effective date. The regulations set forth in this subpart 2 are effective April 1, 1972.

JAMES C. FLETCHER,
Administrator.

NASA FOREIGN PATENT LICENSING REGULATIONS

Selected NASA inventions are also available for licensing in countries other than the United States in accordance with the NASA Foreign Patent Licensing Regulation (14 C.F.R. 1245.4), a copy of which is available from any NASA Patent Counsel.

TABLE OF CONTENTS

Section 1 • Abstracts

Subject Categories (1975-)

AERONAUTICS

Includes aeronautics (general); aerodynamics; air transportation and safety; aircraft communications and navigation; aircraft design, testing and performance; aircraft instrumentation; aircraft propulsion and power; aircraft stability and control; and research and support facilities (air).

For related information see also *Astronautics*.

01 AERONAUTICS (GENERAL)

02 AERODYNAMICS

Includes aerodynamics of bodies, combinations, wings, rotors, and control surfaces; and internal flow in ducts and turbomachinery.

For related information see also *34 Fluid Mechanics and Heat Transfer*.

03 AIR TRANSPORTATION AND SAFETY

Includes passenger and cargo air transport operations; and aircraft accidents.

For related information see also *16 Space Transportation* and *85 Urban Technology and Transportation*.

04 AIRCRAFT COMMUNICATIONS AND NAVIGATION

Includes digital and voice communication with aircraft; air navigation systems (satellite and ground based); and air traffic control.

For related information see also *17 Spacecraft Communications, Command and Tracking* and *32 Communications*.

05 AIRCRAFT DESIGN, TESTING AND PERFORMANCE

Includes aircraft simulation technology.

For related information see also *18 Spacecraft Design, Testing and Performance* and *39 Structural Mechanics*.

06 AIRCRAFT INSTRUMENTATION

Includes cockpit and cabin display devices; and flight instruments.

For related information see also *19 Spacecraft Instrumentation* and *35 Instrumentation and Photography*.

07 AIRCRAFT PROPULSION AND POWER

Includes prime propulsion systems and systems components, e.g., gas turbine engines and compressors; and on-board auxiliary power plants for aircraft.

For related information see also *20 Spacecraft Propulsion and Power*, *28 Propellants and Fuels*, and *44 Energy Production and Conversion*.

08 AIRCRAFT STABILITY AND CONTROL

Includes aircraft handling qualities; piloting; flight controls; and autopilots.

09 RESEARCH AND SUPPORT FACILITIES (AIR)

Includes airports, hangars and runways; aircraft repair and overhaul facilities; wind tunnels; shock tube facilities; and engine test blocks.

For related information see also *14 Ground Support Systems and Facilities (Space)*.

ASTRONAUTICS

Includes astronautics (general); astrodynamics; ground support systems and facilities (space); launch vehicles and space vehicles; space transportation; spacecraft communications, command and tracking; spacecraft design, testing and performance; spacecraft instrumentation; and spacecraft propulsion and power.

For related information see also *Aeronautics*.

12 ASTRONAUTICS (GENERAL)

For extraterrestrial exploration see *91 Lunar and Planetary Exploration*.

13 ASTRODYNAMICS

Includes powered and free-flight trajectories; and orbit and launching dynamics.

14 GROUND SUPPORT SYSTEMS AND FACILITIES (SPACE)

Includes launch complexes, research and production facilities; ground support equipment, e.g., mobile transporters; and simulators.

For related information see also *09 Research and Support Facilities (Air)*.

15 LAUNCH VEHICLES AND SPACE VEHICLES

Includes boosters; manned orbital laboratories; reusable vehicles; and space stations.

16 SPACE TRANSPORTATION

Includes passenger and cargo space transportation, e.g., shuttle operations; and rescue techniques.

For related information see also *03 Air Transportation and Safety* and *85 Urban Technology and Transportation*.

17 SPACECRAFT COMMUNICATIONS, COMMAND AND TRACKING

Includes telemetry; space communications networks; astronavigation; and radio blackout.

For related information see also *04 Aircraft Communications and Navigation* and *32 Communications*.

18 SPACECRAFT DESIGN, TESTING AND PERFORMANCE

Includes spacecraft thermal and environmental control; and attitude control.

For life support systems see *54 Man/System Technology and Life Support*. For related information see also *05 Aircraft Design, Testing and Performance* and *39 Structural Mechanics*.

19 SPACECRAFT INSTRUMENTATION

For related information see also *06 Aircraft Instrumentation* and *35 Instrumentation and Photography*.

20 SPACECRAFT PROPULSION AND POWER

Includes main propulsion systems and components, e.g., rocket engines; and spacecraft auxiliary power sources.

For related information see also *07 Aircraft Propulsion and Power*, *28 Propellants and Fuels*, and *44 Energy Production and Conversion*.

CHEMISTRY AND MATERIALS

Includes chemistry and materials (general); composite materials; inorganic and physical chemistry; metallic materials; nonmetallic materials; and propellants and fuels.

23 CHEMISTRY AND MATERIALS (GENERAL)

Includes biochemistry and organic chemistry.

24 COMPOSITE MATERIALS

Includes laminates.

25 INORGANIC AND PHYSICAL CHEMISTRY

Includes chemical analysis, e.g., chromatography; combustion theory; electrochemistry; and photochemistry.

For related information see also *77 Thermodynamics and Statistical Physics*.

26 METALLIC MATERIALS

Includes physical, chemical, and mechanical properties of metals, e.g., corrosion; and metallurgy.

27 NONMETALLIC MATERIALS

Includes physical, chemical, and mechanical properties of plastics, elastomers, lubricants, polymers, textiles, adhesives, and ceramic materials.

28 PROPELLANTS AND FUELS

Includes rocket propellants, igniters, and oxidizers; storage and handling; and aircraft fuels.

For related information see also *07 Aircraft Propulsion and Power*, *20 Spacecraft Propulsion and Power*, and *44 Energy Production and Conversion*.

ENGINEERING

Includes engineering (general); communications; electronics and electrical engineering; fluid mechanics and heat transfer; instrumentation and photography; lasers and masers; mechanical engineering; quality assurance and reliability; and structural mechanics.

For related information see also *Physics*.

31 ENGINEERING (GENERAL)

Includes vacuum technology; control engineering; display engineering; and cryogenics.

32 COMMUNICATIONS

Includes land and global communications; communications theory; and optical communications.

For related information see also *04 Aircraft Communications and Navigation* and *17 Spacecraft Communications, Command and Tracking*.

33 ELECTRONICS AND ELECTRICAL ENGINEERING

Includes test equipment and maintainability; components, e.g., tunnel diodes and transistors; microminiaturization; and integrated circuitry.

For related information see also *60 Computer Operations and Hardware* and *76 Solid-State Physics*.

34 FLUID MECHANICS AND HEAT TRANSFER

Includes boundary layers; hydrodynamics; fluidics; mass transfer; and ablation cooling.

For related information see also *02 Aerodynamics* and *77 Thermodynamics and Statistical Physics*.

35 INSTRUMENTATION AND PHOTOGRAPHY

Includes remote sensors; measuring instruments and gages; detectors; cameras and photographic supplies; and holography.

For aerial photography see *43 Earth Resources*. For related information see also *06 Aircraft Instrumentation* and *19 Spacecraft Instrumentation*.

36 LASERS AND MASERS

Includes parametric amplifiers.

37 MECHANICAL ENGINEERING

Includes auxiliary systems (non-power); machine elements and processes; and mechanical equipment.

38 QUALITY ASSURANCE AND RELIABILITY

Includes product sampling procedures and techniques; and quality control.

39 STRUCTURAL MECHANICS

Includes structural element design and weight analysis; fatigue; and thermal stress.

For applications see *05 Aircraft Design, Testing and Performance* and *18 Spacecraft Design, Testing and Performance*.

GEOSCIENCES

Includes geosciences (general); earth resources; energy production and conversion; environment pollution; geophysics; meteorology and climatology; and oceanography.

For related information see also *Space Sciences*.

42 GEOSCIENCES (GENERAL)

43 EARTH RESOURCES

Includes remote sensing of earth resources by aircraft and spacecraft; photogrammetry; and aerial photography.

For instrumentation see *35 Instrumentation and Photography*.

44 ENERGY PRODUCTION AND CONVERSION

Includes specific energy conversion systems, e.g., fuel cells and batteries; global sources of energy; fossil fuels; geophysical conversion; hydroelectric power; and wind power.

For related information see also *07 Aircraft Propulsion and Power*, *20 Spacecraft Propulsion and Power*, *28 Propellants and Fuels*, and *85 Urban Technology and Transportation*.

45 ENVIRONMENT POLLUTION

Includes air, noise, thermal and water pollution; environment monitoring; and contamination control.

46 GEOPHYSICS

Includes aeronomy; upper and lower atmosphere studies; ionospheric and magnetospheric physics; and geomagnetism.

For space radiation see *93 Space Radiation*.

47 METEOROLOGY AND CLIMATOLOGY

Includes weather forecasting and modification.

48 OCEANOGRAPHY

Includes biological, dynamic and physical oceanography; and marine resources.

LIFE SCIENCES

Includes life sciences (general); aerospace medicine; behavioral sciences; man/system technology and life support; and planetary biology.

51 LIFE SCIENCES (GENERAL)

Includes genetics.

52 AEROSPACE MEDICINE

Includes physiological factors; biological effects of radiation; and weightlessness.

53 BEHAVIORAL SCIENCES

Includes psychological factors; individual and group behavior; crew training and evaluation; and psychiatric research.

54 MAN/SYSTEM TECHNOLOGY AND LIFE SUPPORT

Includes human engineering; biotechnology; and space suits and protective clothing.

55 PLANETARY BIOLOGY

Includes exobiology; and extraterrestrial life.

MATHEMATICAL AND COMPUTER SCIENCES

Includes mathematical and computer sciences (general); computer operations and hardware; computer programming and software; computer systems; cybernetics; numerical analysis; statistics and probability; systems analysis; and theoretical mathematics.

59 MATHEMATICAL AND COMPUTER SCIENCES (GENERAL)

60 COMPUTER OPERATIONS AND HARDWARE

Includes computer graphics and data processing.

For components see *33 Electronics and Electrical Engineering*.

61 COMPUTER PROGRAMMING AND SOFTWARE

Includes computer programs, routines, and algorithms.

62 COMPUTER SYSTEMS

Includes computer networks.

63 CYBERNETICS

Includes feedback and control theory.

For related information see also *54 Man/System Technology and Life Support*.

64 NUMERICAL ANALYSIS

Includes iteration, difference equations, and numerical approximation.

65 STATISTICS AND PROBABILITY

Includes data sampling and smoothing; Monte Carlo method; and stochastic processes.

66 SYSTEMS ANALYSIS

Includes mathematical modeling; network analysis; and operations research.

67 THEORETICAL MATHEMATICS

Includes topology and number theory.

PHYSICS

Includes physics (general); acoustics; atomic and molecular physics; nuclear and high-energy physics; optics; plasma physics; solid-state physics; and thermodynamics and statistical physics.

For related information see also *Engineering*.

70 PHYSICS (GENERAL)

For geophysics see *46 Geophysics*. For astrophysics see *90 Astrophysics*. For solar physics see *92 Solar Physics*.

71 ACOUSTICS

Includes sound generation, transmission, and attenuation.

For noise pollution see *45 Environment Pollution*.

72 ATOMIC AND MOLECULAR PHYSICS

Includes atomic structure and molecular spectra.

73 NUCLEAR AND HIGH-ENERGY PHYSICS

Includes elementary and nuclear particles; and reactor theory.

For space radiation see *93 Space Radiation*.

74 OPTICS

Includes light phenomena.

75 PLASMA PHYSICS

Includes magnetohydrodynamics and plasma fusion.

For ionospheric plasmas see *46 Geophysics*. For space plasmas see *90 Astrophysics*.

76 SOLID-STATE PHYSICS

Includes superconductivity.

For related information see also *33 Electronics and Electrical Engineering* and *36 Lasers and Masers*.

77 THERMODYNAMICS AND STATISTICAL PHYSICS

Includes quantum mechanics; and Bose and Fermi statistics.

For related information see also *25 Inorganic and Physical Chemistry* and *34 Fluid Mechanics and Heat Transfer*.

SOCIAL SCIENCES

Includes social sciences (general); administration and management; documentation and information science; economics and cost analysis; law and political science; and urban technology and transportation.

80 SOCIAL SCIENCES (GENERAL)

Includes educational matters.

81 ADMINISTRATION AND MANAGEMENT

Includes management planning and research.

82 DOCUMENTATION AND INFORMATION SCIENCE

Includes information storage and retrieval technology; micrography; and library science.

For computer documentation see *61 Computer Programming and Software*.

83 ECONOMICS AND COST ANALYSIS

Includes cost effectiveness studies.

84 LAW AND POLITICAL SCIENCE

Includes space law; international law; international cooperation; and patent policy.

85 URBAN TECHNOLOGY AND TRANSPORTATION

Includes applications of space technology to urban problems; technology transfer; technology assessment; and surface and mass transportation.

For related information see *03 Air Transportation and Safety*, *16 Space Transportation*, and *44 Energy Production and Conversion*.

SPACE SCIENCES

Includes space sciences (general); astronomy; astrophysics; lunar and planetary exploration; solar physics; and space radiation.

For related information see also *Geosciences*.

88 SPACE SCIENCES (GENERAL)**89 ASTRONOMY**

Includes radio and gamma-ray astronomy; celestial mechanics; and astrometry.

90 ASTROPHYSICS

Includes cosmology; and interstellar and interplanetary gases and dust.

91 LUNAR AND PLANETARY EXPLORATION

Includes planetology; and manned and unmanned flights.

For spacecraft design see *18 Spacecraft Design, Testing and Performance*. For space stations see *15 Launch Vehicles and Space Vehicles*.

92 SOLAR PHYSICS

Includes solar activity, solar flares, solar radiation and sunspots.

93 SPACE RADIATION

Includes cosmic radiation; and inner and outer earth's radiation belts.

For biological effects of radiation see *52 Aerospace Medicine*. For theory see *73 Nuclear and High-Energy Physics*.

GENERAL**99 GENERAL**

Subject Categories

(1969 - 1974)

01 Aerodynamics

Includes aerodynamics of bodies, combinations, internal flow in ducts and turbomachinery; wings, rotors, and control surfaces. For applications see: 02 Aircraft and 32 Space Vehicles. For related information see also: 12 Fluid Mechanics; and 33 Thermodynamics and Combustion.

02 Aircraft

Includes fixed-wing airplanes, helicopters, gliders, balloons, ornithopters, etc.; and specific types of complete aircraft (e.g., ground effect machines, STOL, and VTOL); flight tests; operating problems (e.g., sonic boom); safety and safety devices; economics; and stability and control. For basic research see: 01 Aerodynamics. For related information see also: 31 Space Vehicles; and 32 Structural Mechanics.

03 Auxiliary Systems

Includes fuel cells, energy conversion cells, and solar cells; auxiliary gas turbines; hydraulic, pneumatic and electrical systems; actuators; and inverters. For related information see also: 09 Electronic Equipment; 22 Nuclear Engineering; and 28 Propulsion Systems.

04 Biosciences

Includes aerospace medicine, exobiology, radiation effects on biological systems; physiological and psychological factors. For related information see also: 05 Biotechnology.

05 Biotechnology

Includes life support systems, human engineering; protective clothing and equipment; crew training and evaluation, and piloting. For related information see also: 04 Biosciences.

06 Chemistry

Includes chemical analysis and identification (e.g., spectroscopy). For applications see: 17 Materials, Metallic; 18 Materials, Nonmetallic; and 27 Propellants.

07 Communications

Includes communications equipment and techniques; noise; radio and communications blackout; modulation telemetry; tracking radar and optical observation; and wave propagation. For basic research see: 23 Physics, General; and 21 Navigation.

08 Computers

Includes computer operation and programming; and data processing. For applications, see specific categories. For related information see also: 19 Mathematics.

09 Electronic Equipment

Includes electronic test equipment and maintainability; component parts, e.g., electron tubes, tunnel diodes, transistors, integrated circuitry; microminiaturization. For basic research see: 10 Electronics. For related information see also: 07 Communications and 21 Navigation.

10 Electronics

Includes circuit theory; and feedback and control theory. For applications see: 09 Electronic Equipment. For related information see specific Physics categories.

11 Facilities, Research and Support

Includes airports; lunar and planetary bases including associated vehicles; ground support systems; related logistics; simulators; test facilities (e.g., rocket engine test stands, shock tubes, and wind tunnels); test ranges; and tracking stations.

12 Fluid Mechanics

Includes boundary-layer flow; compressible flow; gas dynamics; hydrodynamics; and turbulence. For related information see also: 01 Aerodynamics; and 33 Thermodynamics and Combustion.

13 Geophysics

Includes aeronomy; upper and lower atmosphere studies; oceanography; cartography; and geodesy. For related information see also: 20 Meteorology; 29 Space Radiation; and 30 Space Sciences.

14 Instrumentation and Photography

Includes design, installation, and testing of instrumentation systems; gyroscopes; measuring instruments and gages; recorders, transducers; aerial photography; and telescopes and cameras.

15 Machine Elements and Processes

Includes bearings, seals, pumps, and other mechanical equipment; lubrication, friction, and wear; manufacturing processes and quality control; reliability; drafting; and materials fabrication, handling, and inspection.

16 Masers

Includes applications of masers and lasers. For basic research see: 26 Physics, Solid-State.

17 Materials, Metallic

Includes cermets; corrosion; physical and mechanical properties of materials; metallurgy; and applications as structural materials. For basic research see: 06 Chemistry. For related information see also: 18 Materials, Nonmetallic; and 32 Structural Mechanics.

18 Materials, Nonmetallic

Includes corrosion; physical and mechanical properties of materials (e.g., plastics); and elastomers, hydraulic fluids, etc. For basic research see: 06 Chemistry. For related information see also: 17 Materials, Metallic; 27 Propellants; and 32 Structural Mechanics.

19 Mathematics

Includes calculation methods and theory; and numerical analysis. For applications see specific categories. For related information see also: 08 Computers.

No

20 Meteorology

Includes climatology; weather forecasting; and visibility studies. For related information see also: 13 Geophysics; and 30 Space Sciences.

21 Navigation

Includes guidance; autopilots; star and planet tracking; inertial platforms; and air traffic control. For related information see also: 07 Communications.

22 Nuclear Engineering

Includes nuclear reactors and nuclear heat sources used for propulsion and auxiliary power. For basic research see: 24 Physics, Atomic, Molecular, and Nuclear. For related information see also: 03 Auxiliary Systems; and 28 Propulsion Systems.

23 Physics, General

Includes acoustics, cryogenics, mechanics, and optics. For astrophysics see: 30 Space Sciences. For geophysics and related information see also: 13 Geophysics, 20 Meteorology, and 29 Space Radiation.

24 Physics, Atomic, Molecular, and Nuclear

Includes atomic, molecular and nuclear physics. For applications see: 22 Nuclear Engineering. For related information see also: 29 Space Radiation.

25 Physics, Plasma

Includes magnetohydrodynamics. For applications see: 28 Propulsion Systems.

26 Physics, Solid-State

Includes semiconductor theory; and superconductivity. For applications see: 16 Masers. For related information see also: 10 Electronics.

27 Propellants

Includes fuels; igniters; and oxidizers. For basic re-

search see: 06 Chemistry; and 33 Thermodynamics and Combustion. For related information see also: 28 Propulsion Systems.

28 Propulsion Systems

Includes air breathing, electric, liquid, solid, and magnetohydrodynamic propulsion. For nuclear propulsion see: 22 Nuclear Engineering. For basic research see: 23 Physics, General; and 33 Thermodynamics and Combustion. For applications see: 31 Space Vehicles. For related information see also: 27 Propellants.

29 Space Radiation

Includes cosmic radiation; solar flares; solar radiation, and Van Allen radiation belts. For related information see also: 13 Geophysics, and 24 Physics, Atomic, Molecular, and Nuclear.

30 Space Sciences

Includes astronomy and astrophysics; cosmology; lunar and planetary flight and exploration; and theoretical analysis of orbits and trajectories. For related information see also: 11 Facilities, Research and Support; and 31 Space Vehicles.

31 Space Vehicles

Includes launch vehicles; manned space capsules; clustered and multistage rockets; satellites; sounding rockets and probes; and operating problems. For basic research see: 30 Space Sciences. For related information see also: 28 Propulsion Systems; and 32 Structural Mechanics.

32 Structural Mechanics

Includes structural element design and weight analysis; fatigue; thermal stress; impact phenomena; vibration; flutter; inflatable structures; and structural tests. For related information see also: 17 Materials, Metallic; and 18 Materials, Nonmetallic.

33 Thermodynamics and Combustion

Includes ablation, cooling, heating, heat transfer, thermal balance, and other thermal effects; and combustion theory. For related information see also: 12 Fluid Mechanics; and 27 Propellants.

34 General

Includes information of a broad nature related to industrial applications and technology, and to basic research; defense aspects; information retrieval; management; law and related legal matters; and legislative hearings and documents.

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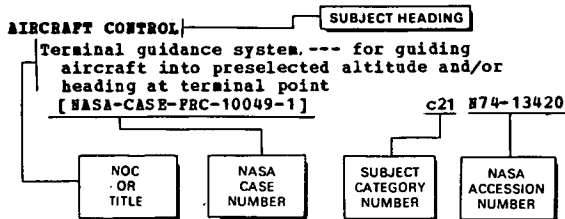
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NASA PATENT ABSTRACTS BIBLIOGRAPHY

JULY 1976

Section 2

Typical Subject Index Listing



The subject heading is the key to the subject content of the document. A brief description of the document, e.g., title, title plus a title extension, or Notation of Content (NOC), is included for each subject entry to indicate the subject heading context; these descriptions are arranged under each subject heading in ascending accession number order. The NASA Case Number serves as the prime access number to the patent documents. The Subject Category Number indicates the category in Section 1 (Abstracts) in which the patent citation and abstract are located. The NASA accession number denotes the number by which the citation is identified within the subject category.

A

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- Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding [NASA-CASE-XMS-02677] c31 N70-42075
- Hypersonic test facility for studying ablation in models under high pressure and high temperature [NASA-CASE-XLA-00378] c11 N71-15925
- Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure [NASA-CASE-XLA-05378] c11 N71-21475
- Ablation sensor for measuring char layer recession rate using electric wires [NASA-CASE-XLA-01794] c33 N71-21586
- Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres [NASA-CASE-XLA-01791] c14 N71-22991
- Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface [NASA-CASE-LEW-10359] c33 N72-25911

ABLATIVE MATERIALS

- Filling honeycomb matrix with deaerated paste filler [NASA-CASE-XMS-01108] c15 N69-24322
- Sensor device with switches for measuring surface recession of charring and noncharring ablators [NASA-CASE-XLA-01781] c14 N69-39975
- Vacuum method for molding thermosetting compounds used as ablative materials [NASA-CASE-XLA-01091] c15 N71-10672
- Ablative resins used for retarding regression in ablative material [NASA-CASE-XLE-05913] c33 N71-14032
- Design, development, and characteristics of ablation structures [NASA-CASE-XMS-01816] c33 N71-15623
- Method and apparatus for fabrication of heat insulating and ablative reentry structure [NASA-CASE-XMS-02009] c33 N71-20834
- Production and application of sprayable fiber reinforced ablation material [NASA-CASE-XLA-04251] c18 N71-26100
- Ablative heat shield for protection from aerodynamic heating of reentry spacecraft [NASA-CASE-MSC-12143-1] c33 N72-17947
- Ablative system with liquid carrying ablative material bodies and forming self-replacing

- ablative surface [NASA-CASE-LEW-10359] c33 N72-25911
- Carrier liquid system containing bodies of ablative material [NASA-CASE-LEW-10359-2] c33 N73-25952
- Ablation article and surface for analyzing flow transition on ablative surface [NASA-CASE-LAR-10439-1] c33 N73-27796
- Dual measurement ablation sensor [NASA-CASE-LAR-10105-1] c33 N74-15652
- ABORT APPARATUS**
 - Coupling device for linear shaped charge for space vehicle abort system [NASA-CASE-XLA-00189] c33 N70-36846
- ABRASION RESISTANCE**
 - Zinc dust formulation for abrasion resistant steel coatings [NASA-CASE-GSC-10361-1] c18 N72-23581
- ABSORBENTS**
 - Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions [NASA-CASE-XMS-01492] c05 N70-41297
 - Fluid flow control valve for regulating fluids in molecular quantities [NASA-CASE-XLE-00703] c15 N71-15967
 - Noncontaminating swab with absorbent end covered with netted envelope to prevent egress of absorbent material [NASA-CASE-MPS-18100] c15 N72-11390
 - Protein sterilization of firefly luciferase without denaturation [NASA-CASE-GSC-10225-1] c06 N73-27086
- ABSORBERS (MATERIALS)**
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 - Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature [NASA-CASE-XMP-04208] c33 N71-29051
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 - Cross linked polymer system for oil or fat absorption properties [NASA-CASE-NPO-11609-1] c06 N72-22114
- ABSORPTION CROSS SECTIONS**
 - Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration [NASA-CASE-HSC-12280] c27 N71-16348
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 - Scattering independent determination of absorption and emission coefficients and radiative equilibrium state [NASA-CASE-NPO-13677-1] c35 N75-16791
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 - Alternating current signal generator providing

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- plurality of amplitude modulated output signals
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- Improved alternator with windings of
superconducting materials acting as permanent
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- Superconducting alternator design with cryogenic
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- ACCELERATION**
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[NASA-CASE-LAR-11645-1] c02 N74-26456

AIRCRAFT GUIDANCE
Terminal guidance system --- for guiding
aircraft into preselected altitude and/or
heading at terminal point
[NASA-CASE-FRC-10049-1] c21 N74-13420

AIRCRAFT HAZARDS
Deflector for preventing objects from entering
nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788

AIRCRAFT HYDRAULIC SYSTEMS
Variable-orifice hydraulic mechanism for
aircraft gas turbine engine fuel control
[NASA-CASE-LEW-11187-1] c28 N73-19793

AIRCRAFT INSTRUMENTS
Aircraft instrument for indicating malfunctions
during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807
Pressure probe for sensing ambient static air
pressures
[NASA-CASE-XLA-00481] c14 N70-36824
Aircraft indicator for pilot control of takeoff
roll, climbout path and verticle flight path
in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157
Optical projector system for establishing
optimum arrangement of instrument displays in
aircraft, spacecraft, other vehicles, and
industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882
Combined optical attitude and altitude
indicating instrument for use in aircraft or
spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
Aircraft horizon and vertical indicator
[NASA-CASE-ERC-10392] c21 N73-14692
Magnetic heading reference
[NASA-CASE-LAR-11387-1] c06 N75-12947

AIRCRAFT LANDING
Aerodynamic configuration for aircraft capable
of high speed flight and low drag for low
speed takeoff or landing upon presently
existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
Magnetic method for detection of aircraft
position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619

Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

AIRCRAFT MODELS
Free flight suspension system for use with
aircraft models in wind tunnel tests
[NASA-CASE-XLA-00939] c11 N71-15926
Variable geometry wind tunnel for testing
aircraft models at subsonic speeds
[NASA-CASE-XLA-07430] c11 N72-22246
Deploy/release system --- model aircraft flight
control
[NASA-CASE-LAR-11575-1] c33 N75-12195

AIRCRAFT PERFORMANCE
Development of auxiliary lifting system to
provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257

AIRCRAFT PILOTS
Apparatus for applying simulator g-forces to an
arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c11 N74-30597

AIRCRAFT SAFETY
Aircraft instrument for indicating malfunctions
during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807
Development and operating principles of
collision warning system for aircraft accident
prevention
[NASA-CASE-HQN-10703] c21 N73-13643
Deployable flexible ventral fins for use as an
emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c02 N74-30421

AIRCRAFT STABILITY
Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
Development of aerodynamic control system to
control flutter over large range of
oscillatory frequencies using stability
augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004

AIRCRAFT STRUCTURES
Fatigue testing device applying random discrete
load levels to test specimen and applicable to
aircraft structures
[NASA-CASE-XLA-02131] c32 N70-42003
Heat flux sensor adapted for mounting on
aircraft or spacecraft to measure aerodynamic
heat flux inflow to aircraft skin
[NASA-CASE-XPR-03802] c33 N71-23085
Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c14 N74-13129
Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c18 N74-16249

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Airfoil with cambered trailing edge section for
supersonic flight
[NASA-CASE-LAR-10585-1] c01 N73-14981

AIRFOILS
Electric analog for measuring induced drag on
nonplanar airfoils
[NASA-CASE-XLA-00755] c01 N71-13410
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nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411
Single wing supersonic aircraft --- with pivotal
attachment of airfoil
[NASA-CASE-ARC-10470-3] c01 N74-30414
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surfaces on airfoils
[NASA-CASE-LAR-11522-1] c15 N74-34881

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Design of dual fuselage aircraft with pivoting
wing and horizontal stabilizer to permit
yawing of wing in flight for high speed
operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
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nose-down pitching moments due to high lift
forces, loss of trim lift, and engine-out
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of high speed flight and low drag for low
speed takeoff or landing upon presently
existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858

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New trifunctional alcohol derived from trimer
acid and novel method of preparation

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- [NASA-CASE-NPO-10714] c06 N69-31244
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- ALDEHYDES**
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two amines and two aldehydes
[NASA-CASE-XMP-08655] c06 N71-11239
Synthesis of azine polymers for heat shields by
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[NASA-CASE-XMP-08656] c06 N71-11242
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polymers using Schiff base
[NASA-CASE-XMP-03074] c06 N71-24740
- ALIGNMENT**
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use with roundness measuring apparatus
[NASA-CASE-XMP-00480] c14 N70-39898
Portable device for aligning surfaces of two
adjacent wall or sheet sections for joining at
point of junction
[NASA-CASE-XMP-01452] c15 N70-41371
Electro-optical/computer system for aligning
large structural members and maintaining
correct position
[NASA-CASE-XNP-02029] c14 N70-41955
Electrical and electromechanical trigonometric
computation assembly and space vehicle
guidance system for aligning perpendicular
axes of two sets of three-axes coordinate
references
[NASA-CASE-XMP-00684] c21 N71-21688
Description of device for aligning stacked
sheets of paper for repetitive cutting
[NASA-CASE-XMS-04178] c15 N71-22798
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alignment between target, laser generator, and
astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
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[NASA-CASE-GSC-10514-1] c14 N72-20379
Guide accessories for correctly aligning paper
in typewriter to correct typographical errors
[NASA-CASE-MPS-15218-1] c15 N73-31438
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using laser with gravitationally sensitive
cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
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silicate coatings for temperature control of
spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979
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metal silicate paint with ultraviolet
reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183
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electric cell with anode made from one or more
alkali metals and cathode made from oxidizing
material
[NASA-CASE-LEW-11358] c03 N71-26084
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high purity
[NASA-CASE-XNP-08876] c17 N73-28573
- ALKALINE BATTERIES**
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[NASA-CASE-XNP-01464] c03 N71-10728
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[NASA-CASE-XGS-05434] c03 N71-20491
- ALKYL COMPOUNDS**
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fluoroalkylene oxides with alkali salt of
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[NASA-CASE-MPS-10507] c06 N73-30101
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Brazing alloy adapted for brazing corrosion
resistant steel to refractory metals, also for
brazing refractory metals to other refractory
metals
[NASA-CASE-XNP-03063] c17 N71-23365
- Metal alloy bearing materials for space
applications
[NASA-CASE-XLE-05033] c15 N71-23810
High thermal emittance black surface coatings
and process for applying to metal and metal
alloy surfaces used in radiative cooling of
spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
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formed of alloy with small coefficient of
thermal expansion supporting screws and
spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
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unrecrystallized alloys
[NASA-CASE-LEW-11388-1] c15 N73-32358
- ALPHANUMERIC CHARACTERS**
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[NASA-CASE-GSC-11582-1] c33 N75-19517
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Characteristics of high power, low distortion,
alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559
Frequency control network for current feedback
oscillators converting dc voltage to ac or
higher dc voltages
[NASA-CASE-GSC-10041-1] c10 N71-19418
Blood pressure measuring system for separately
recording dc and ac pressure signals of
Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
Solid state circuit for switching alternating
current input signal as function of direct
current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799
Device for voltage conversion using controlled
pulse widths and arrangements to generate ac
output voltage
[NASA-CASE-MPS-10068] c10 N71-25139
Inverters for changing direct current to
alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
Dc to ac to dc converter with transistor driven
synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c10 N74-14956
- ALTITUDE**
Combined optical attitude and altitude
indicating instrument for use in aircraft or
spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- ALTITUDE CONTROL**
Ambient atmospheric pressure sensing device for
determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925
- ALUMINUM**
Joining aluminum to stainless steel by bonding
aluminum coatings onto titanium coated
stainless steel and brazing aluminum to
aluminum/titanium coated steel
[NASA-CASE-MPS-07369] c15 N71-20443
Low concentration alkaline solution treatment of
aluminum with metal phosphate surface coatings
to improve chemical bonding and reduce coating
weight
[NASA-CASE-XLA-01995] c18 N71-23047
Etching aluminum alloys with aqueous solution
containing sulfuric acid, hydrofluoric acid,
and an alkali metal dischromate for adhesive
bonding
[NASA-CASE-XNP-02303] c17 N71-23828
Process for producing dispersion strengthened
nickel with aluminum comprising metallic
matrices embedded with oxides or other
hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830
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conventional soldering of structural aluminum
bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
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[NASA-CASE-LEW-11359] c03 N71-28579
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Graded band gap p-n junction gallium arsenide/gallium aluminum arsenide solar cell
[NASA-CASE-LAR-11174-1] c03 N73-26047

A panel for selectively absorbing solar thermal energy and the method for manufacturing the panel
[NASA-CASE-NFS-22562-1] c03 N74-19700

ALUMINUM ALLOYS

High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XNP-02786] c17 N71-20743

Etching aluminum alloys with aqueous solution containing sulfuric acid, hydrofluoric acid, and an alkali metal dischromate for adhesive bonding
[NASA-CASE-XNP-02303] c17 N71-23828

Method of fluxless brazing and diffusion bonding of aluminum containing components
[NASA-CASE-MSC-14435-1] c15 N74-20071

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Intermetallic chromium containing nickel aluminide for high temperature corrosion protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414

Coating superalloys
[NASA-CASE-LEW-11696-3] c17 N74-27963

Preparing oxidizer coating metal fuel particles
[NASA-CASE-NPO-11975-1] c27 N74-33209

Method of protecting the surface of a substrate --- by applying aluminide coating
[NASA-CASE-LEW-11696-1] c37 N75-13261

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[NASA-CASE-LEW-11696-2] c26 N75-19408

ALUMINUM OXIDES

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-2] c15 N74-34002

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992

ALUMINUM SILICATES

White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-XNP-02139] c18 N71-24184

AMBULANCES

Communication system for transmitting biomedical information obtained from patient in moving ambulance to hospital for diagnosis
[NASA-CASE-PRC-10031] c05 N70-20717

AMINES

Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XNP-08655] c06 N71-11239

Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XNP-08652] c06 N71-11243

Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c06 N74-12812

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[NASA-CASE-ARC-10469-1] c25 N75-12086

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[NASA-CASE-NPO-12130-1] c25 N75-14844

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Solid state chemical source for ammonia beam masers
[NASA-CASE-XGS-01504] c16 N70-41578

Low to high temperature energy conversion system --- using ammonia
[NASA-CASE-NPO-13510-1] c44 N75-16972

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Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14090

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Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986

Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
[NASA-CASE-XGS-01784] c10 N71-20782

Diversity receiving system with diversity phase lock
[NASA-CASE-XGS-01222] c10 N71-20841

Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256

Amplifying circuit with constant current source for accumulator load and high gain voltage amplification
[NASA-CASE-NPO-11023] c09 N72-17155

AMPLIFIER DESIGN

Automatic gain control amplifier system
[NASA-CASE-XMS-05307] c09 N69-24330

Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c09 N74-21851

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Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466

Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-XAC-05422] c04 N71-23185

Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831

Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234

Digital data handling circuits for pulse amplifiers
[NASA-CASE-XNP-01068] c10 N71-28739

Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171

Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-PRC-10072-1] c09 N74-14939

Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014

Reflected wave maser --- low noise amplifier
[NASA-CASE-NPO-13490-1] c36 N75-16827

AMPLITUDE DISTRIBUTION ANALYSIS

Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885

Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659

Analog to digital converter circuit for pulse height analysis
[NASA-CASE-XNP-00477] c08 N73-28045

AMPLITUDE MODULATION

Alternating current signal generator providing plurality of amplitude modulated output signals
[NASA-CASE-XNP-05612] c09 N69-21468

Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals
[NASA-CASE-XAC-04030] c10 N71-19472

Development of apparatus for amplitude modulation of diode laser by periodic discharge of direct current power supply
[NASA-CASE-XMS-04269] c16 N71-22895

Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude
[NASA-CASE-XAC-02807] c09 N71-23021

Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26142

High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430

Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c07 N74-19788

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[NASA-CASE-GSC-11446-1] c09 N74-20860

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[NASA-CASE-NPO-10169] c10 N71-24844

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ANTENNA ARRAYS

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[NASA-CASE-IMP-01097] c10 N71-16058

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[NASA-CASE-MPS-13046] c07 N71-19433

Electronic divider and multiplier for analog electric signals
[NASA-CASE-IPR-05637] c09 N71-19480

Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
[NASA-CASE-ARC-10466-1] c60 N75-13539

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[NASA-CASE-GSC-10880-1] c08 N72-11172

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[NASA-CASE-NPO-10068] c08 N71-19288

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[NASA-CASE-XGS-02612] c08 N71-19435

Analog signal to discrete time converter
[NASA-CASE-ERC-10048] c09 N72-25251

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[NASA-CASE-XAC-00404] c08 N70-40125

Analog to digital converter for converting pulses to frequencies
[NASA-CASE-XLA-00670] c08 N71-12501

Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
[NASA-CASE-XAC-04031] c08 N71-18594

Voltage drift compensation circuit for analog-to-digital converter
[NASA-CASE-IMP-04780] c08 N71-19687

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[NASA-CASE-LFW-10345-1] c10 N71-25899

Data acquisition system for converting displayed analog signal to digital values
[NASA-CASE-NPO-10344] c10 N71-26544

Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XLA-06713] c14 N71-28991

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[NASA-CASE-NPO-11018] c08 N72-21200

Analog to digital converter using offset voltage to eliminate errors
[NASA-CASE-MSC-13110-1] c08 N72-22163

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[NASA-CASE-NPO-10560] c08 N72-22166

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[NASA-CASE-NPO-11016] c08 N72-31226

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[NASA-CASE-NPO-11821-1] c08 N73-26175

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[NASA-CASE-IMP-00477] c08 N73-28045

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[NASA-CASE-NPO-13385-1] c08 N74-32646

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Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199

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[NASA-CASE-IMP-09451] c06 N71-26754

Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477

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[NASA-CASE-ARC-10802-1] c14 N74-28933

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[NASA-CASE-MSC-13802-2] c14 N74-32883

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[NASA-CASE-IMP-05224] c14 N71-23726

Barometers for measuring peak wind speeds during severe environmental conditions
[NASA-CASE-MPS-20916] c14 N73-25460

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[NASA-CASE-IMP-04415] c14 N71-24693

Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674

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[NASA-CASE-FRC-10071-1] c07 N74-20813

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Strain gage accelerometer for angular acceleration measurement
[NASA-CASE-XMS-05936] c14 N70-41682

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Device for determining relative angular position of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490

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Stretch Yo-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016

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Characteristics and performance of electrical system to determine angular rotation
[NASA-CASE-IMP-00447] c14 N70-33179

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Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585

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Synthesis of high purity dianilinosilanes
[NASA-CASE-IMP-06409] c06 N71-23230

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Automatic real-time pair-feeding system for animals
[NASA-CASE-ARC-10302-1] c04 N74-15778

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Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
[NASA-CASE-XGS-04047-2] c03 N72-11062

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[NASA-CASE-XLE-00145] c28 N70-36806

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[NASA-CASE-GSC-10709-1] c28 N71-25213

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[NASA-CASE-XLE-00222] c02 N70-37939

ANODES

Design and characteristics of heat activated electric cell with anode made from one or more alkali metals and cathode made from oxidizing material
[NASA-CASE-LFW-11358] c03 N71-26084

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[NASA-CASE-NPO-11806-1] c03 N74-19693

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Anodizing method for providing metal surfaces with temperature reducing coatings against flames
[NASA-CASE-XLE-00035] c33 N71-29151

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Monopole antenna system for maximum omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200

Radio receiver with array of independently steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775

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[NASA-CASE-GSC-10452] c07 N71-12396

Tracking antenna system with array for synchronous satellite or ground based radar

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[NASA-CASE-XMS-09610] c07 N71-24625
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[NASA-CASE-MSC-12205-1] c07 N71-27056
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[NASA-CASE-GSC-10220-1] c07 N71-27233
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[NASA-CASE-XGS-02290] c07 N71-28809
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[NASA-CASE-NPO-10301] c07 N72-11148
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[NASA-CASE-LAR-10545-1] c09 N72-21244
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[NASA-CASE-ERC-10214] c09 N72-31235
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with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
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[NASA-CASE-GSC-11013-1] c09 N73-19234
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antenna scan of celestial body
[NASA-CASE-MSC-12593-1] c09 N74-14942
Amplitude steered array
[NASA-CASE-GSC-11446-1] c09 N74-20860

ANTENNA COMPONENTS
Digital servo controller --- for rotating
antenna shaft
[NASA-CASE-KSC-10769-1] c09 N74-29556

ANTENNA DESIGN
Development and characteristics of low-noise
multimode monopulse antenna feed system for
use with microwave communication equipment
[NASA-CASE-XNP-01735] c07 N71-22750
Nose cone mounted heat resistant antenna
comprising plurality of adjacent layers of
silica not introducing paths of high thermal
conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
Development of electronic circuit for combining
input signals on two separate antennas to form
two processed signals
[NASA-CASE-MSC-12205-1] c07 N71-27056
Development and characteristics of extensible
dipole antenna using deformable tubular
metallic strip element
[NASA-CASE-HQN-00937] c07 N71-28979
Development of method for suppressing excitation
of electromagnetic surface waves on dielectric
converter antenna
[NASA-CASE-XLA-10772] c07 N71-28980
Target acquisition antenna feed with reflector
system
[NASA-CASE-GSC-10064-1] c10 N72-22235
Collapsible high gain antenna which can be
automatically expanded to operating state
[NASA-CASE-KSC-10392] c07 N73-26117
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c09 N74-29575
Highly efficient antenna system using a
corrugated horn and scanning hyperboloid
reflector
[NASA-CASE-NPO-13568-1] c33 N75-14964
Dish antenna having switchable beamwidth ---
with truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c33 N75-19516

ANTENNA FEEDS
Design and operation of multi-feed cone
Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
Characteristics of antenna horn feeds consisting
of central horn with overlapping peripheral
horns
[NASA-CASE-GSC-10452] c07 N71-12396
Target acquisition antenna feed with reflector
system
[NASA-CASE-GSC-10064-1] c10 N72-22235
Multimode antenna feed system for microwave and
broadband communication

[NASA-CASE-GSC-11046-1] c07 N73-28013
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c07 N74-11000
High efficiency multifrequency feed
[NASA-CASE-GSC-11317-3] c09 N74-20863
Two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c09 N74-34649

ANTENNA RADIATION PATTERNS
Broadband chokes and absorbers to reduce
spurious radiation patterns of antenna array
caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
Multiple mode horn antenna with radiation
pattern of equal beamwidths and suppressed
sidelobes
[NASA-CASE-XNP-01057] c07 N71-15907
Monopulse scanning network for scanning
volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
High impact antennas with high radiating
efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
Pattern and impedance matching improvements in
transversely polarized triaxial antenna
[NASA-CASE-XGS-02290] c07 N71-28809
Dielectric loaded aperture antenna with
directive radiation pattern from waveguide
[NASA-CASE-LAR-11084-1] c09 N73-12216
System for locating lightning strokes by
coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
Highly efficient antenna system using a
corrugated horn and scanning hyperboloid
reflector
[NASA-CASE-NPO-13568-1] c33 N75-14964

ANTENNAS
Antenna design with self erecting mesh reflector
[NASA-CASE-XGS-09190] c31 N71-16102
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[NASA-CASE-NPO-10231] c07 N71-26101
Collapsible antenna boom and coaxial
transmission line having inflatable inner tube
[NASA-CASE-NFS-20068] c07 N71-27191
Conical reflector antenna with feed
approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127

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with combination of standard type lubrication
and magnetic flux field for earth atmosphere
and space environment operation
[NASA-CASE-XNP-01641] c15 N71-22997
Development of rolling element bearing for
operation in ultrahigh vacuum environment
[NASA-CASE-XLE-09527-2] c15 N71-26189
Development of optical system for detecting
defective components in rotating machinery
with emphasis on bearing assemblies
[NASA-CASE-KSC-10752-1] c15 N73-27407
Fatigue life of hybrid antifriction bearings at
ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
Hollow high strength rolling elements for
antifriction bearings fabricated from
preformed components
[NASA-CASE-LEW-11026-1] c15 N73-33383

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Exponential horn, copper plate, magnetic hammer,
and anvil in apparatus for making diamonds
[NASA-CASE-NFS-20698] c15 N72-20446

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sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
Threadless fastener apparatus comprising
receiving apertures for plurality of articles,
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nonmalleable materials in both ends
[NASA-CASE-XPR-05302] c15 N71-23254
Electron microscope and method of making annular
objective aperture
[NASA-CASE-ARC-10448-1] c14 N72-21421
Apparatus for on-film optical recording of
camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431
Electron microscope aperture system
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[NASA-CASE-MSC-12279-1] c15 N70-35679
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- Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437
- APPLICATIONS TECHNOLOGY SATELLITES**
- Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
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- Fuel system for thermal nuclear reactor which uses inorganic ion exchanger
[NASA-CASE-LEW-11645-2] c22 N73-28660
- Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834
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- Development of device to prevent high voltage arcing in electron beam welding
[NASA-CASE-XMP-08522] c15 N71-19486
- Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- Method and apparatus for nondestructive testing --- using high frequency arc discharges
[NASA-CASE-MPS-21233-1] c23 N74-15395
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[NASA-CASE-XLA-00330] c33 N70-34540
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[NASA-CASE-XAC-00319] c25 N70-41628
- ARC JET ENGINES**
- Improving performance of magnetoplasmadynamic arc rocket engine
[NASA-CASE-LEW-11180-1] c25 N73-25760
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- Starting circuit design for initiating and maintaining arcs in vapor lamps
[NASA-CASE-XNP-01058] c09 N71-12540
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[NASA-CASE-XMP-02039] c15 N71-15871
- Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MPS-13046] c07 N71-19433
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[NASA-CASE-XMP-08522] c15 N71-19486
- Development of apparatus for automatically changing carriage speed of welding machine to obtain constant speed of torch along work surface
[NASA-CASE-XNP-07069] c15 N71-23815
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[NASA-CASE-MSC-19095-1] c37 N75-19683
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[NASA-CASE-MSC-12233-2] c32 N73-13921
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- Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
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[NASA-CASE-MPS-21611-1] c54 N75-12616
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[NASA-CASE-XGS-05290] c09 N71-25999
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[NASA-CASE-GSC-10607-1] c15 N72-20442
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[NASA-CASE-ARC-10592-2] c06 N74-11926
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[NASA-CASE-MPS-22356-1] c06 N74-29479
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[NASA-CASE-GSC-11531-1] c05 N74-27566
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[NASA-CASE-LAR-10670-1] c06 N73-30097
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[NASA-CASE-XLA-03127] c11 N71-10776
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[NASA-CASE-XNP-02595] c31 N71-21881
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[NASA-CASE-LEW-11101-1] c31 N73-32750
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[NASA-CASE-GSC-10555-1] c21 N71-27324
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[NASA-CASE-MSC-12568-1] c18 N73-16577
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- Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
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[NASA-CASE-XLA-00166] c02 N70-34178
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[NASA-CASE-XLA-05332] c05 N71-11194
- Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
- Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161
- Development of improved convolute section for pressurized suits to provide high degree of mobility in response to minimum of applied torque
[NASA-CASE-XMS-09637-1] c05 N71-24730
- Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity
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- Hand-held maneuvering unit for propulsion and

- attitude control of astronauts in zero or reduced gravity environment
[NASA-CASE-XMS-05304] c05 N71-12336
- Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XMF-07488] c11 N71-18773
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[NASA-CASE-XMS-02977] c11 N71-10746
- Low and zero gravity simulator for astronaut training
[NASA-CASE-MPS-10555] c11 N71-19494
- Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474
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Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MPS-21042] c07 N72-25171
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[NASA-CASE-MPS-21481-1] c15 N74-18127
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[NASA-CASE-XNP-09572] c14 N71-15621
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[NASA-CASE-LAR-10226-1] c14 N73-19419
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[NASA-CASE-MSC-10966] c14 N71-19568
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[NASA-CASE-NPO-11087] c23 N71-29125
- Star image motion compensator using telescope for maintaining fixed images
[NASA-CASE-LAR-10523-1] c14 N72-22444
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[NASA-CASE-NPO-11373] c13 N72-25323
- Development and operation of apparatus for sampling particulates in gases in upper atmosphere
[NASA-CASE-HQN-10037-1] c14 N73-27376
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[NASA-CASE-NPO-11919-1] c14 N74-11284
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Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-IAC-02058] c02 N71-16087
- Development of method for measuring electron density gradients of plasma sheath around space vehicle during atmospheric entry
[NASA-CASE-XLA-06232] c25 N71-20563
- Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015
- ATMOSPHERIC ENTRY SIMULATION**
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[NASA-CASE-XLA-00675] c25 N70-33267
- Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436
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[NASA-CASE-KSC-10730-1] c14 N73-32318
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Radiometric measuring system for solar activity and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432
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[NASA-CASE-MPS-21244-1] c36 N75-15028
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[NASA-CASE-NPO-13677-1] c35 N75-16791
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Passive optical wind and turbulence remote detection system
[NASA-CASE-XMF-14032] c20 N71-16340
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[NASA-CASE-NPO-10467] c23 N71-26654
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Atomic standard with variable storage volume --- in cylindrical, flexible bellows
[NASA-CASE-GSC-11895-1] c15 N74-33997
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[NASA-CASE-ERC-10224-2] c09 N73-27150
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Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420
- ATTITUDE (INCLINATION)**
Analog spatial maneuver computer with three output angles for obtaining desired spatial attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172
- Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640
- Translatory shock absorbers for attitude sensors
[NASA-CASE-MPS-22905-1] c35 N75-10407
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[NASA-CASE-XMS-12158-1] c31 N69-27499
- Unitary three-axis controller for flight vehicles within or outside atmosphere
[NASA-CASE-XFR-00181] c21 N70-33279
- Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
- Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-XMP-00185] c21 N70-34539
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[NASA-CASE-XNP-00465] c21 N70-35395
- Attitude control device for space vehicles
[NASA-CASE-XNP-00294] c21 N70-36938
- Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
- Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996
- Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581
- Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746
- Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771
- Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
- Development of spacecraft experiment pointing and attitude control system
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- System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
- Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-XMF-01598] c21 N71-15583
- Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
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[NASA-CASE-XAC-02405] c09 N71-16089
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
- Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
- Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750
- Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160
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[NASA-CASE-LAR-10586-1] c14 N74-15089
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[NASA-CASE-NPO-13044-1] c14 N74-15094
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[NASA-CASE-XNP-00465] c21 N70-35395
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[NASA-CASE-MPS-22787-1] c21 N74-35096
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- Photosensitive light source device for detecting unannounced spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089
- Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255
- Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
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[NASA-CASE-ERC-10392] c21 N73-14692
- Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089
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[NASA-CASE-XLA-01989] c21 N70-34295
- Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873
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[NASA-CASE-ARC-10716-1] c31 N73-32784
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- Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
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- High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
- Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-NPO-11147] c14 N72-27408
- AUDITORY PERCEPTION**
- Auditory display for the blind
[NASA-CASE-HQN-10832-1] c14 N74-21014
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- Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-HSC-12223-1] c07 N71-26181
- Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
- AUDITORY STIMULI**
- Auditory display for the blind
[NASA-CASE-HQN-10832-1] c14 N74-21014
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[NASA-CASE-LEW-11267-1] c17 N73-32414
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[NASA-CASE-MPS-22907-1] c26 N75-10210
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[NASA-CASE-NPO-10351] c08 N71-12503
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[NASA-CASE-XNP-00746] c07 N71-21476
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- Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
- Electro-optical/computer system for aligning large structural members and maintaining correct position
[NASA-CASE-XNP-02029] c14 N70-41955
- Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057
- Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
- Computer controlled apparatus for maintaining welding torch angle and velocity during seam tracking
[NASA-CASE-XMF-03287] c15 N71-15607
- Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
- Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-MSC-10966] c14 N71-19568
- Welding torch with automatic speed controller using speed sensing wheel and closed servo system
[NASA-CASE-XMF-01730] c15 N71-23050
- Microwave waveguide switch with rotor position control
[NASA-CASE-XNP-06507] c09 N71-23548
- Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
- Automatic controlled thermal fatigue testing apparatus
[NASA-CASE-XLA-02059] c33 N71-24276
- Automatically charging battery of electric storage cells
[NASA-CASE-XNP-04758] c03 N71-24605
- Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XMF-05195] c10 N71-24861
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[NASA-CASE-NPO-10625] c09 N71-26182
- Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
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[NASA-CASE-XNP-09451] c06 N71-26754
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AUTOMATIC CONTROL VALVES

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regulation of electric driven motor vehicle
[NASA-CASE-MPO-11210] c11 N72-20244
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equipotential lines on sheet of resistance paper
[NASA-CASE-MPO-11134] c09 N72-21246
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field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771
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space suit
[NASA-CASE-ARC-10599-1] c05 N73-26071
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[NASA-CASE-MPS-20207-1] c09 N73-32107
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[NASA-CASE-ARC-10447-1] c05 N74-22771
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[NASA-CASE-MPS-22039-1] c09 N75-12968
Traffic survey system --- using optical scanners
[NASA-CASE-MPS-22631-1] c35 N75-13226
Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014

AUTOMATIC CONTROL VALVES

Ambient atmospheric pressure sensing device for
determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925
Describing metal valve pintle with encapsulated
elastomeric body
[NASA-CASE-MSC-12116-1] c15 N71-17648
Semitoroidal diaphragm cavitating flow control
valve
[NASA-CASE-MNP-09704] c12 N71-18615
Reliability of automatic refilling valving
device for cryogenic liquid systems
[NASA-CASE-MPO-11177] c15 N72-17453
Combined pressure regulator and shutoff valve
[NASA-CASE-MPO-13201-1] c37 N75-15050

AUTOMATIC FREQUENCY CONTROL

System for phase locking onto carrier frequency
signal located within receiver bandpass
[NASA-CASE-IGS-04994] c09 N69-21543
Audio signal processing system for noise surge
elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
Automatic frequency control device for providing
frequency reference for voltage controlled
oscillator
[NASA-CASE-KSC-10393] c09 N72-21247
Self-tuning electronic filter for maintaining
constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231

AUTOMATIC GAIN CONTROL

Automatic gain control amplifier system
[NASA-CASE-XMS-05307] c09 N69-24330
Automatic measuring and recording of gain and
zero drift characteristics of electronic
amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986
Self-tuning electronic filter for maintaining
constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231

AUTOMATIC TEST EQUIPMENT

Automated visual sensitivity tester for
determining visual field sensitivity and blind
spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c14 N74-10422

AXES (REFERENCE LINES)

Test fixture for measuring moment of inertia of
irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992
Mechanism for restraining universal joints to
prevent separation while allowing bending,
angulation, and lateral offset in any position
about axis
[NASA-CASE-MNP-02278] c15 N71-28951

AXES OF ROTATION

Unitary three-axis controller for flight
vehicles within or outside atmosphere
[NASA-CASE-XPR-00181] c21 N70-33279
Proportional controller for regulating aircraft
or spacecraft motion about three axes
[NASA-CASE-XAC-03392] c03 N70-41954
Electrical and electromechanical trigonometric
computation assembly and space vehicle
guidance system for aligning perpendicular

axes of two sets of three-axes coordinate
references
[NASA-CASE-MNP-00684] c21 N71-21688
Hand controller operable about three
respectively perpendicular axes and capable of
actuating signal generators for attitude
control devices
[NASA-CASE-XMS-07487] c15 N71-23255
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[NASA-CASE-LEW-11076-4] c15 N74-18134
AXIAL COMPRESSION LOADS
Development and characteristics of device for
indicating and recording magnitude of force
applied in axial direction
[NASA-CASE-MSC-15626-1] c14 N72-25411
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Multistage multiple reentry axial flow reaction
turbine with reverse flow reentry ducting
[NASA-CASE-XLE-00170] c15 N70-36412
Multistage, multiple reentry, single rotor,
axial flow turbine
[NASA-CASE-XLE-00085] c28 N70-39895
AXIAL LOADS
Ball locking device which releases in response
to small forces when subjected to high axial
loads
[NASA-CASE-MNP-01371] c15 N70-41829
AZIMUTH
Tracking mount for laser telescope employed in
tracking large rockets and space vehicles to
give information regarding azimuth and elevation
[NASA-CASE-MPS-14017] c14 N71-26627
Long range laser traversing system
[NASA-CASE-GSC-11262-1] c16 N74-21091

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azine-aromatic aldehyde reaction
[NASA-CASE-MNP-08656] c06 N71-11242
Ultraviolet and thermally stable polymer
compositions --- poly/(diarylsiloxy)/arylazines
[NASA-CASE-ARC-10592-2] c06 N74-11926
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compositions
[NASA-CASE-ARC-10592-1] c18 N74-21156

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Molding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c15 N74-13177

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Electronic background suppression field scanning
sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980

BACKSCATTERING

Apparatus for measuring backscatter and
transmission characteristics of sample segment
of large spherical passive satellites
[NASA-CASE-XGS-02608] c07 N70-41678
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c14 N74-15091

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Flexible backup bar for welding awkwardly shaped
structures
[NASA-CASE-MNP-00722] c15 N70-40204
Reliable electrical element heater using plural
wire system and backup power sources
[NASA-CASE-MPS-21462-1] c09 N74-14935

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Decontamination of petroleum products with honey
[NASA-CASE-MNP-03835] c06 N71-23499
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contamination by adenosine triphosphate light
reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
Enzymatic luminescent bioassay method for
determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
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[NASA-CASE-HQN-10541-3] c23 N72-23695

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Light radiation direction indicator with baffle of two parallel grids
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[NASA-CASE-MPS-23009-1] c37 N75-12328

Magnetic bearing --- for supplying magnetic fluxes
[NASA-CASE-GSC-11079-1] c37 N75-18574

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Decontamination of petroleum products with honey
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Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473

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[NASA-CASE-XNP-01855] c15 N71-28937

Atomic standard with variable storage volume --- in cylindrical, flexible bellows
[NASA-CASE-GSC-11895-1] c15 N74-33997

Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
[NASA-CASE-MPS-19193-1] c37 N75-19686

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Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c15 N74-32917

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Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XNP-09422] c07 N71-19436

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[NASA-CASE-XAC-05632] c32 N71-23971

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[NASA-CASE-XNP-10475] c15 N71-24679

Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408

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Charged particle analyzer with periodically varying voltage applied across electrostatic deflection members
[NASA-CASE-XAC-05506-1] c24 N71-16095

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Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993

Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMP-02964] c14 N71-17659

BENDING MOMENTS

Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XNP-03198] c30 N70-40353

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Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626

BENZENE

Para-benzoquinone dioxime and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572

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Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408

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[NASA-CASE-LEW-11938-1] c33 N75-16746

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[NASA-CASE-XAR-03786] c09 N69-21313

Design and development of linear actuator based on bimetallic spring expansion
[NASA-CASE-NPO-10637] c15 N72-12409

Application of spiral, bimetallic strip to create circular motion on mechanical shaft by changing strip temperature
[NASA-CASE-NPO-11283] c09 N72-25260

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[NASA-CASE-MPS-20433] c15 N72-28496

Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c15 N74-15126

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Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773

Logic circuit for generating multibit binary code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103

Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-NPO-10342] c10 N71-33407

Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209

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Nondestructive interrogating and state changing circuit for binary magnetic storage elements
[NASA-CASE-XGS-00174] c08 N70-34743

Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602

Describing circuit for obtaining sum of squares of numbers
[NASA-CASE-XGS-04765] c08 N71-18693

Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613

- Phase modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c07 N73-27107
- Differential phase shift keyed communication system
[NASA-CASE-MSC-14065-1] c07 N74-26654
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- Logarithmic converter for compressing 19-digit binary input number to 8-digit output
[NASA-CASE-XLA-00471] c08 N70-34778
- Circuit diagram and operation of full binary adder
[NASA-CASE-XGS-00689] c08 N70-34787
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[NASA-CASE-NPO-10112] c08 N71-12502
- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
- Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571
- Characteristics of comparator circuits for comparison of binary numbers in information processing system
[NASA-CASE-XNP-04819] c08 N71-23295
- Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
- Binary concatenated coding system to measure, count, and record numerical information using minimized number of digits
[NASA-CASE-MSC-14082-1] c08 N73-16163
- Family of m-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254
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[NASA-CASE-XNP-00432] c08 N70-35423
- Design and operation of high speed binary to decimal conversion system
[NASA-CASE-XGS-01230] c08 N71-19544
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- High speed direct binary to binary coded decimal converter for use in PCM telemetry systems
[NASA-CASE-KSC-10326] c08 N72-21197
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[NASA-CASE-XMS-00259] c18 N70-36400
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[NASA-CASE-XGS-01231] c14 N70-41676
- Bioassay of flavin coenzymes
[NASA-CASE-GSC-10565-1] c06 N72-25149
- Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
- Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c14 N74-19093
- Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
- BIOELECTRIC POTENTIAL**
- Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
- Manufacturing process for making perspiration resistant-stress resistant biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120
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[NASA-CASE-XMS-04213-1] c09 N71-26002
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- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c09 N74-21851
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[NASA-CASE-XAC-00435] c09 N70-35440
- Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
- Characteristics of pressed disc electrode for biological measurements
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[NASA-CASE-MSC-13282-1] c05 N71-24729
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[NASA-CASE-XMS-04213-1] c09 N71-26002
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[NASA-CASE-ARC-10597-1] c05 N74-20726
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[NASA-CASE-XMS-04212-1] c05 N71-12346
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- Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
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[NASA-CASE-GSC-11531-1] c05 N74-27566
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- Communication system for transmitting biomedical information obtained from patient in moving ambulance to hospital for diagnosis
[NASA-CASE-FRC-10031] c05 N70-20717
- Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
- Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MSC-14180-1] c05 N73-22045
- Miniature multichannel biotelemetry system
[NASA-CASE-NPO-13065-1] c05 N74-26625
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[NASA-CASE-XNP-08883] c23 N71-16101
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- Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
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[NASA-CASE-XNP-03835] c06 N71-23499

CARBON ARCS
Water cooled contactors for holding rotating
carbon arc anode
[NASA-CASE-XMS-03700] c15 N69-24266

CARBON COMPOUNDS
Vapor deposited laminated nitride-silicon
coating for corrosion prevention of
carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075

CARBON DIOXIDE
Carbon dioxide purge systems to prevent
condensation in spaces between cryogenic fuel
tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
Fast response miniature carbon dioxide detector
with no moving parts for measuring
concentration in any atmosphere
[NASA-CASE-MSC-13332-1] c14 N72-21408
Method for detecting pollutants --- ozone,
nitrogen dioxide, carbon dioxide
[NASA-CASE-LAR-11405-1] c35 N75-15938

CARBON DIOXIDE LASERS
Repetitively pulsed wavelength selective carbon
dioxide laser
[NASA-CASE-ERC-10178] c16 N71-24832

CARBON DIOXIDE REMOVAL

SUBJECT INDEX

- Performance of ac power supply developed for CO₂ laser system
[NASA-CASE-GSC-11222-1] c16 N73-32391
- CARBON DIOXIDE REMOVAL**
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c06 N74-12813
- CARBON MONOXIDE**
Carbon monoxide monitor --- using real time
[NASA-CASE-MFS-22060-1] c35 N75-10414
- CARBONATES**
Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
[NASA-CASE-MFS-10512] c06 N73-30099
- CARBOXYL GROUP**
Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929
- CARBOXYLIC ACIDS**
Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MFS-21040-1] c06 N73-30098
Ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-MFS-22356-1] c06 N74-29479
- CARCINOGENS**
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
- CARDIOGRAPHY**
Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ARC-10753-1] c05 N74-13818
- CARDIOLOGY**
Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473
- CARDIOTACHOMETERS**
Digital computing cardiometer
[NASA-CASE-MFS-20284-1] c05 N74-12778
- CARDIOVASCULAR SYSTEM**
Conditioning suit for normal function of astronaut cardiovascular system in gravity environment
[NASA-CASE-XLA-02898] c05 N71-20268
Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-XAC-05422] c04 N71-23185
- CARRIER FREQUENCIES**
Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-XMP-01160] c07 N71-11298
Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113
Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c09 N74-17930
Decision feedback loop for tracking a polyphase modulated carrier
[NASA-CASE-NPO-13103-1] c07 N74-20811
- CARRIER WAVES**
Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810
Phase modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c07 N73-27107
- CARRIERS**
Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-MFS-20075] c09 N71-26133
Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c12 N74-27744
- CARTESIAN COORDINATES**
Design and development of random function tracer for obtaining coordinates of points on contour maps
[NASA-CASE-XLA-01401] c15 N71-21179
- CARTRIDGES**
Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-XGS-00769] c14 N70-41647
Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-XGS-01223] c07 N71-10609
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c06 N74-12813
- CASCADE CONTROL**
Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245
- CASES (CONTAINERS)**
Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
Radioactive isotope capsule container design for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c33 N71-35153
- CASSEGRAIN ANTENNAS**
Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
[NASA-CASE-XNP-00683] c09 N70-35425
Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
Dual frequency feed systems for Cassegrainian antennas
[NASA-CASE-NPO-13091-1] c09 N73-12214
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c07 N74-11000
- CASTING**
Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975
- CASTINGS**
Method of making an apertured casting
[NASA-CASE-LEW-11169-1] c15 N74-18131
- CATALYSIS**
Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504
- CATALYSTS**
Catalyst for increased growth of boron carbide crystal whiskers
[NASA-CASE-XHQ-03903] c15 N69-21922
Catalyst bed element removing tool
[NASA-CASE-XPR-00811] c15 N70-36901
Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
Development of device for detecting hydrogen in ambient environments
[NASA-CASE-MFS-11537] c14 N71-20442
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c06 N74-12813
- CATALYTIC ACTIVITY**
Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579
- CATHETERIZATION**
Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597

CATHODE RAY TUBES

- Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659
- Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571
- Indexing mechanism for cathode array substitution in electron beam tube
[NASA-CASE-NPO-10625] c09 N71-26182
- Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
- Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248
- Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273
- Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474

CATHODES

- Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
- Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
- Design and characteristics of heat activated electric cell with anode made from one or more alkali metals and cathode made from oxidizing material
[NASA-CASE-LEW-11358] c03 N71-26084
- Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
- Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions
[NASA-CASE-NPO-11806-1] c03 N74-19693

CATIONS

- Water insoluble, cationic permselective membrane
[NASA-CASE-NPO-11091] c18 N72-22567

CAVITATION FLOW

- Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-09704] c12 N71-18615

CAVITIES

- Black body radiometer having isothermally surrounded cavity for ultraviolet, visible, and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323
- Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-XNP-05999] c15 N71-29032
- Soil burrowing mole apparatus
[NASA-CASE-XNP-07169] c15 N73-32362

CAVITY RESONATORS

- Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
- Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616
- Thermally sensitive tuning probe for nullifying detuning effects in microwave cavity resonator of amplifier
[NASA-CASE-XNP-00449] c14 N70-35220
- Holder for high frequency crystal resonators
[NASA-CASE-XNP-03637] c15 N71-21311
- Superconductive resonant cavity for improved signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
- Infrared tunable dye laser with nonlinear wavelength mixing crystal in optical cavity
[NASA-CASE-ABC-10463-1] c09 N73-32111
- Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQB-10790-1] c16 N74-11313

CELESTIAL BODIES

- Device for determining relative angular position of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490

CELESTIAL NAVIGATION

- Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797

CELL ANODES

- Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
- Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034

CELLS

- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742

CELLS (BIOLOGY)

- Improved method of detecting and counting bacteria
[NASA-CASE-GSC-11917-1] c04 N74-26619

CENTRIFUGES

- Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
- Liquid-gaseous centrifugal separator for weightlessness environment
[NASA-CASE-XLA-00415] c15 N71-16079
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c12 N74-29652
- Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c12 N74-30608

CERAMIC BONDING

- Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610
- Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312

CERAMIC COATINGS

- Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483
- Unfired-ceramic, highly reflective composite insulation for large launch vehicles
[NASA-CASE-XMP-01030] c18 N70-41583
- Unfired ceramic insulation for protection from radiant heating environments
[NASA-CASE-NFS-14253] c33 N71-24858
- Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- Ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c18 N74-30004
- Ceramic coating for silica insulation
[NASA-CASE-MSC-14270-1] c18 N74-30005

CERAMIC NUCLEAR FUELS

- Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729

CERAMICS

- Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
- Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication
[NASA-CASE-XGS-02435] c18 N71-22998
- Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
- Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-XNP-05999] c15 N71-29032
- Extrusion can for extruding ceramics under heat and pressure
[NASA-CASE-NPO-10812] c15 N73-13464
- Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
- Method of making an apertured casting
[NASA-CASE-LEW-11169-1] c15 N74-18131
- Insulation foil and method of making
[NASA-CASE-LEW-11484-2] c24 N75-14839

CERNETS

- Freeze casting of metal ceramic and refractory compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076
- Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability

- [NASA-CASE-LEW-10219-1] c18 N71-28729
Development of method for fabricating cernets
and analysis of various compositions to show
electrical and physical properties
[NASA-CASE-NPO-13120-1] c18 N73-23629
- CESIUM**
Heated tungsten filter for removing oxygen
impurities from cesium
[NASA-CASE-XNP-04262-2] c17 N71-26773
Production of iodine isotope by high energy
bombardment of cesium heat pipe causing
spallation reaction
[NASA-CASE-LEW-11390-2] c24 N73-20763
- CESIUM DIODES**
Oxygen-doped tantalum emitter for thermionic
devices such as cesium vapor diodes
[NASA-CASE-NPO-11138] c03 N70-34646
Thermionic cesium diode converter with cavity
emitters
[NASA-CASE-NPO-10412] c09 N71-28421
- CESIUM ENGINES**
Variable thrust ion engine using thermal
decomposition of solid cesium compound to
produce propulsive vapor
[NASA-CASE-XNP-00923] c28 N70-36802
Method for producing porous tungsten plates for
ionizing cesium compounds for propulsion of
ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
- CESIUM VAPOR**
Electric power generation system directly from
laser power
[NASA-CASE-NPO-13308-1] c03 N74-19702
- CHANNEL FLOW**
Fabrication method for lightweight
regeneratively cooled combustion chamber of
channel construction
[NASA-CASE-XLE-00150] c28 N70-41818
Heated element sensor for fluid flow detection
in thermal conductive conduit with adaptive
means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569
- CHANNELS (DATA TRANSMISSION)**
Error correction circuitry for binary signal
channels
[NASA-CASE-XNP-03263] c09 N71-18843
Helical recorder for multiple channel recording
[NASA-CASE-GSC-10614-1] c09 N72-11224
Asynchronous, multiplexing, single line
transmission and recovery data system --- for
satellite use
[NASA-CASE-NPO-13321-1] c07 N74-19806
- CHARACTER RECOGNITION**
Automatic character skew and spacing checking
network --- for digital tape drive systems
[NASA-CASE-GSC-11925-1] c35 N75-16792
- CHARGE DISTRIBUTION**
Operation of vidicon tube for scanning spatial
charge density pattern
[NASA-CASE-XNP-06028] c09 N71-23189
- CHARGE TRANSFER**
Electronic counter circuit utilizing magnetic
core and low power consumption
[NASA-CASE-XNP-08836] c09 N71-12515
- CHARGED PARTICLES**
Method of forming thin window drifted silicon
charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560
Charged particle analyzer with periodically
varying voltage applied across electrostatic
deflection members
[NASA-CASE-XAC-05506-1] c24 N71-16095
Electrostatic charged particle collector
containing stacked electrodes for microwave tube
[NASA-CASE-LEW-11192-1] c09 N73-13208
Resistive anode image converter
[NASA-CASE-HQN-10876-1] c35 N75-19621
- CHARGING**
Development of device for simulating charge and
discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
- CHARRING**
Sensor device with switches for measuring
surface recession of charring and noncharring
ablaters
[NASA-CASE-XLA-01781] c14 N69-39975
Ablation sensor for measuring char layer
recession rate using electric wires
[NASA-CASE-XLA-01794] c33 N71-21586
- CHECKOUT**
Digital computer system for automatic prelaunch
checkout of spacecraft
[NASA-CASE-XKS-08012-2] c31 N71-15566
Rapid activation and checkout device for batteries
[NASA-CASE-MPS-22749-1] c14 N74-34861
- CHEMLATES**
Ammonium perchlorate composite propellant with
organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14090
- CHEMICAL ANALYSIS**
Analytical test apparatus and method for
determining oxygen content in alkali liquid
metal
[NASA-CASE-XLE-01997] c06 N71-23527
Automated fluid chemical analyzer for
microchemical analysis of small quantities of
liquids by use of selected reagents and
analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
Method for determining presence and type of OH
in MgO
[NASA-CASE-NPO-10774] c06 N72-17095
Development and characteristics of injection
system for use with gas chromatograph
[NASA-CASE-ARC-10344-1] c14 N72-21433
Micrometeoroid analyzer using arrays of
interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477
Gas chromatograph injection system
[NASA-CASE-ARC-10344-2] c14 N74-20021
Chromato-fluorographic drug detector --- device
for detecting and recording fluorescent
properties of materials
[NASA-CASE-ARC-10633-1] c14 N74-26947
Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
- CHEMICAL AUXILIARY POWER UNITS**
Development and characteristics of ion-exchange
membrane and electrode assembly for fuel cells
or electrolysis cells
[NASA-CASE-XMS-02063] c03 N71-29044
- CHEMICAL COMPOSITION**
Rubber composition for expulsion bladders and
diaphragms for use with hydrazine
[NASA-CASE-NPO-11433] c18 N71-31140
Phototropic composition of matter with
sensitivity to ultraviolet light and usable
for producing positive photographic images
[NASA-CASE-XGS-03736] c14 N72-22443
Frequency scanning particle size spectrometer
[NASA-CASE-NPO-13606-1] c35 N75-19627
- CHEMICAL COMPOUNDS**
Ultraviolet chromatographic detector for
quantitative and qualitative analysis of
compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428
- CHEMICAL ELEMENTS**
Apparatus for remote handling of materials ---
mixing or analyzing dangerous chemicals
[NASA-CASE-LAR-10634-1] c15 N74-18123
- CHEMICAL MACHINING**
Reusable masking boot for chemical machining
operations
[NASA-CASE-XNP-02092] c15 N70-42033
- CHEMICAL PROPERTIES**
Method for producing alternating ether-siloxane
copolymers with stable properties when exposed
to elevated temperatures and UV radiation
[NASA-CASE-XNP-02584] c06 N71-20905
Chemical and physical properties of synthetic
polyurethane polymer prepared by reacting
hydroxy carbonate with organic diisocyanate
[NASA-CASE-MPS-10512] c06 N73-30099
Chemical and elastic properties of fluorinated
polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076
Thiophenyl ether disiloxanes and trisiloxanes
useful as lubricant fluids
[NASA-CASE-MPS-22411-1] c15 N74-21058
Polyimides of ether-linked aryl tetracarboxylic
dianhydrides
[NASA-CASE-MPS-22355] c06 N74-29480
- CHEMICAL REACTIONS**
Fire retardant polyisocyanurate foam with high
temperature resistance
[NASA-CASE-ARC-10280-1] c18 N70-34695
Process for interfacial polymerization of
pyromellitic dianhydride and tetraamino benzene

- [NASA-CASE-XLA-03104] c06 N71-11235
 Synthesis of polymeric schiff bases by
 schiff-base exchange reactions
 [NASA-CASE-XMP-08651] c06 N71-11236
 Preparation of ordered poly/arylenesiloxane/
 polymers
 [NASA-CASE-XMP-10753] c06 N71-11237
 Synthesis and chemical properties of
 imidazopyrrolone/imide copolymers
 [NASA-CASE-XLA-08802] c06 N71-11238
 Composition and process for improving definition
 of resin masks used in chemical etching
 [NASA-CASE-XGS-04993] c14 N71-17574
 Preparation of inorganic solid film lubricants
 with long wear life and stability in aerospace
 environments
 [NASA-CASE-XMP-03988] c15 N71-21403
 Synthesis of high purity dianilinosilanes
 [NASA-CASE-XMP-06409] c06 N71-23230
 Synthesis of aromatic diamines and dialdehyde
 polymers using Schiff base
 [NASA-CASE-XMP-03074] c06 N71-24740
 Chemical synthesis of hydroxy terminated
 perfluoro ethers as intermediates for highly
 fluorinated polyurethane resins
 [NASA-CASE-NPO-10768] c06 N71-27254
 Chemical synthesis of thermally stable
 organometallic polymers with divalent metal
 ion and tetraphenylphosphonitric units
 [NASA-CASE-NQN-10364] c06 N71-27363
 Apparatus and process for volumetrically
 dispensing reagent quantities of volatile
 chemicals for small batch reactions
 [NASA-CASE-NPO-10070] c15 N71-27372
 Infusible polymer production from reaction of
 polyfunctional epoxy resins with
 polyfunctional aziridine compounds
 [NASA-CASE-NPO-10701] c06 N71-28620
 Process for preparing high molecular weight
 polyaryloxysilanes from lower molecular weight
 forms
 [NASA-CASE-XMP-08674] c06 N71-28807
 Organometallic compounds of niobium and tantalum
 useful for film deposition
 [NASA-CASE-XMP-04023] c06 N71-28808
 Description of method for making homogeneous
 foamed materials in weightless environment
 using materials having different physical
 properties
 [NASA-CASE-XMP-09902] c15 N72-11387
 Method to produce high purity copper fluoride by
 heating copper hydroxyfluoride powder and
 subjecting to flowing fluorine gas
 [NASA-CASE-LEW-10794-1] c06 N72-17093
 Pumping and metering dual piston system and
 monitor for reaction chamber constituents
 [NASA-CASE-GSC-10218-1] c15 N72-21465
 Development of apparatus for producing metal
 powder particles of controlled size
 [NASA-CASE-XLE-06461-2] c17 N72-28535
 Chemical spot tests for identification of
 titanium and titanium alloys used in aerospace
 vehicles
 [NASA-CASE-LAR-10539-1] c17 N73-12547
 Self-cycling fluid heater for heating continuous
 fluid stream to ultrahigh temperatures to
 facilitate chemical reactions
 [NASA-CASE-MSC-15567-1] c33 N73-16918
 Chemical process for production of
 polyisobutylene compounds and application as
 solid rocket propellant binder
 [NASA-CASE-NPO-10893] c27 N73-22710
 Preparation of stable polyurethane polymer by
 reacting polymer with diisocyanate
 [NASA-CASE-MPS-10506] c06 N73-30100
 Preparation of polyurethane polymer by reacting
 hydroxy polyformal with organic diisocyanate
 [NASA-CASE-MPS-10509] c06 N73-30103
 Utilization of lithium p-lithiphenoxide to
 prepare star polymers
 [NASA-CASE-NPO-10998-1] c06 N73-32029
 Polyimide foam for the thermal insulation and
 fire protection
 [NASA-CASE-ARC-10464-1] c06 N74-12812
 Improved method of detecting and counting bacteria
 [NASA-CASE-GSC-11917-1] c04 N74-26619
 Intumescent composition, foamed product prepared
 therewith and process for making same
 [NASA-CASE-ARC-10304-2] c18 N74-27037
- Vapor phase growth of groups III-V compounds by
 hydrogen chloride transport of the elements
 [NASA-CASE-LAR-11144-1] c26 N74-27261
- CHEMICAL TESTS**
 Chemical spot tests for identification of
 titanium and titanium alloys used in aerospace
 vehicles
 [NASA-CASE-LAR-10539-1] c17 N73-12547
 Chemical spot test for identifying magnesium or
 magnesium alloys used in aerospace applications
 [NASA-CASE-LAR-10953-1] c17 N73-27446
- CHLORINATION**
 Chlorine generator for purifying water in life
 support systems of manned spacecraft
 [NASA-CASE-XLA-08913] c14 N71-28933
- CHLOROPRENE RESINS**
 Flexible fire retardant polyisocyanate modified
 neoprene foam --- for thermal protective devices
 [NASA-CASE-ARC-10180-1] c06 N74-12814
- CHOKES**
 Current dependent variable inductance for input
 filter chokes of ac or dc power supplies
 [NASA-CASE-ERC-10139] c09 N72-17154
- CHOKES (RESTRICTIONS)**
 Variably positioned guide vanes for aerodynamic
 choking
 [NASA-CASE-LAR-10642-1] c28 N74-31270
- CHOLESTEROL**
 Reduction of blood serum cholesterol
 [NASA-CASE-NPO-12119-1] c52 N75-15270
- CHROMATOGRAPHY**
 Chromato-fluorographic drug detector --- device
 for detecting and recording fluorescent
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[NASA-CASE-XLE-04603] c33 N71-21507
- COMMAND MODULES**
Energy absorbing crew couch strut for Apollo
command module
[NASA-CASE-MSC-12279] c15 N72-17450
- COMMUNICATING**
Communication between computers using two
identical communications links
[NASA-CASE-NPO-11161] c08 N72-25207
- COMMUNICATION**
Circuitry for developing autocorrelation
function continuously within signal receiving
period
[NASA-CASE-XNP-00746] c07 N71-21476
Superconductive resonant cavity for improved
signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
- COMMUNICATION CABLES**
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use with flat conductor cables
[NASA-CASE-XNP-03498] c15 N71-15986
Process for making RF shielded cable connector
assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083
- COMMUNICATION EQUIPMENT**
Multiplexed communication system design
including automatic correction of transmission
errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814
Binary data decoding device for use at receiving
end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741
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loop used for tracking carrier in angle
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[NASA-CASE-NPO-11282] c10 N73-16205
Doppler compensated communication system for
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[NASA-CASE-GSC-10087-4] c07 N73-20174
Differential phase shift keyed communication
system
[NASA-CASE-MSC-14065-1] c07 N74-26654
- COMMUNICATION SATELLITES**
Erectable, inflatable, radio signal reflecting
passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
Development of antenna system for spin
stabilized communication satellite for
simultaneous reception and transmission of data
[NASA-CASE-XGS-02607] c31 N71-23009
Elimination of tracking occultation problems
occurring during continuous monitoring of
interplanetary missions by using Earth
orbiting communications satellite
[NASA-CASE-XAC-06029-1] c31 N71-24813
Satellite radio communication system with remote
steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
- COMMUTATION**
High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
- COMPUTATORS**
Rocket-borne aspect sensor consisting of
radiation sensor, apertured disk, commutator,
and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
Commutator for steering precisely controlled
bidirectional currents through numerous loads

COMPARATOR CIRCUITS

by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199

COMPARATOR CIRCUITS
Describing frequency discriminator using digital logic circuits and supplying single binary output signal
[NASA-CASE-MFS-14322] c08 N71-18692
Development of pulsed differential comparator circuit
[NASA-CASE-XLE-03804] c10 N71-19471

COMPARATORS
Photometric flow meter with comparator reference means
[NASA-CASE-XGS-01331] c14 N71-22996
Characteristics of comparator circuits for comparison of binary numbers in information processing system
[NASA-CASE-XNP-04819] c08 N71-23295

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Star image motion compensator using telescope for maintaining fixed images
[NASA-CASE-LAR-10523-1] c14 N72-22444

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High strength reinforced metallic composites for applications over wide temperature range
[NASA-CASE-XLE-02428] c17 N70-33288
Method for producing fiber reinforced metallic composites with high strength and elasticity over wide temperature range
[NASA-CASE-XLE-00237] c17 N70-38198
Composites reinforced with short metal fibers or whiskers and having high tensile strength
[NASA-CASE-XLE-00228] c17 N70-38490
Unfired-ceramic, highly reflective composite insulation for large launch vehicles
[NASA-CASE-XNP-01030] c18 N70-41583
Freeze casting of metal ceramic and refractory compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076
Preparation and characteristics of lightweight refractory insulation
[NASA-CASE-XNP-05279] c18 N71-16124
Flexible composite membrane structure impervious to extremely reactive chemicals in rocket propellants
[NASA-CASE-XNP-08837] c18 N71-16210
Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XNP-02964] c14 N71-17659
Description of method for producing metallic composites reinforced with ceramic and refractory hard metals that are fibered in place
[NASA-CASE-XLE-03925] c18 N71-22894
Electrically coupled individually encapsulated solar cell matrix
[NASA-CASE-NPO-11190] c03 N71-34044
Diffusion bonded graphite reinforced aluminum composites
[NASA-CASE-MFS-21077] c18 N71-34502
Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NPO-11036] c15 N72-24522
Method for making fiber composites with high strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539
Development of thermal compensating structure which maintains uniform length with changes in temperature
[NASA-CASE-MFS-20433] c15 N72-28496
Process for developing flame retardant elastomeric composition textiles for use in space suits
[NASA-CASE-MSC-14331-1] c18 N73-27501
Fabrication of polyphenylquinoxaline composite articles by means of in situ polymerization of monomers
[NASA-CASE-LEW-11879-1] c18 N74-20152
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[NASA-CASE-LEW-11582-1] c09 N74-33739
Bearing material --- composite material with low friction surface for rolling or sliding contact
[NASA-CASE-LEW-11930-1] c24 N75-15746
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[NASA-CASE-LEW-11676-1] c37 N75-18576

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[NASA-CASE-LAR-10173-1] c27 N71-14090

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[NASA-CASE-XLA-00204] c32 N70-36536
Shrouded composite propulsion system configuration
[NASA-CASE-XLA-01043] c28 N71-10780
Development of composite structures for spacecraft to serve as anti-meteoroid device
[NASA-CASE-LAR-10788-1] c31 N73-20880
Improved bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c15 N74-14141

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[NASA-CASE-GSC-11889-1] c14 N74-32887

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[NASA-CASE-XHQ-01208] c15 N70-35409

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Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618
Apparatus for tensile strength testing of specimen by pressurized fluid
[NASA-CASE-XKS-06250] c14 N71-15600

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Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
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[NASA-CASE-LAR-10489-1] c15 N74-18124

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[NASA-CASE-NPO-10832] c14 N72-21405
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[NASA-CASE-ARC-10461-1] c33 N74-33379

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[NASA-CASE-LAR-10440-1] c14 N73-32323
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[NASA-CASE-LAR-10426-1] c32 N74-19528

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[NASA-CASE-LEW-10533-1] c15 N73-28515

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[NASA-CASE-XLA-00377] c33 N71-17610
Self-energized plasma compressor
[NASA-CASE-MFS-22145-2] c25 N74-35145

COMPUTATION
Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437

COMPUTER COMPONENTS
Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897

COMPUTER GRAPHICS
System for digitizing graphic displays
[NASA-CASE-NPO-10745] c08 N72-22164

COMPUTER PROGRAMMING
Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917

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[NASA-CASE-NPO-10567] c08 N71-24633
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[NASA-CASE-NPO-13086-1] c15 N73-12495

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- Development of flight simulator system to show position of joystick displacement
[NASA-CASE-NPO-11497] c08 N73-25206
- COMPUTER STORAGE DEVICES**
- Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XMP-05835] c08 N71-12504
- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
- Pulsed magnetic core memory element with blocking oscillator feedback for interrogation without loss of digital information
[NASA-CASE-XGS-03303] c08 N71-18595
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033
- Time division multiplexed telemetry transmitting system controlled by programmed memory
[NASA-CASE-GSC-10131-1] c07 N71-24624
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
- Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
- Redundant memory for enhanced reliability of digital data processing system
[NASA-CASE-GSC-10564] c10 N71-29135
- Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate
[NASA-CASE-ERC-10307] c08 N72-21198
- Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c08 N74-17911
- COMPUTER SYSTEMS DESIGN**
- Adaptive voting computer system
[NASA-CASE-MSC-13932-1] c08 N74-14920
- COMPUTERIZED SIMULATION**
- Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507
- COMPUTERS**
- Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
- Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288
- Communication between computers using two identical communications links
[NASA-CASE-NPO-11161] c08 N72-25207
- CONCAVITY**
- Concave grating spectrometer for use in near and vacuum ultraviolet regions
[NASA-CASE-XGS-01036] c14 N70-40003
- CONCENTRATORS**
- Concentrator device for controlling direction of solar energy onto energy converters
[NASA-CASE-XLE-01716] c09 N70-40234
- Thermostatically controlled nontracking type solar energy concentrator
[NASA-CASE-NPO-13497-1] c44 N75-12429
- CONDENSATES**
- Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-XNP-09699] c06 N71-24607
- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
- CONDENSERS (LIQUIFIERS)**
- Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
- CONDUCTING FLUIDS**
- Multiducted electromagnetic pump for conductive liquids
[NASA-CASE-NPO-10755] c15 N71-27084
- Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
[NASA-CASE-MFS-19193-1] c37 N75-19686
- CONDUCTION**
- Solar energy absorber
[NASA-CASE-MFS-22743-1] c44 N75-10585
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- Measuring conductive heat flow and thermal conductivity of laminar gas stream in cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
- CONDUCTORS**
- Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XMP-07587] c15 N71-18701
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[NASA-CASE-LAR-10994-1] c24 N75-13032
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- Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XMP-09701] c14 N71-26475
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- Observation window for internal gas confining chamber
[NASA-CASE-NPO-10890] c11 N73-12265
- CONICAL BODIES**
- Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
- Conical reflector antenna with feed approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127
- Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130
- CONICAL SHELLS**
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[NASA-CASE-XKS-03495] c14 N69-39785
- Foldable, double cone and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
- Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
- CONNECTORS**
- Expanding and contracting connector strip for solar cell array of Nimbus satellite
[NASA-CASE-XGS-01395] c03 N69-21539
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[NASA-CASE-XLA-01141] c15 N71-13789
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[NASA-CASE-XLA-05056] c15 N72-11389
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[NASA-CASE-GSC-11215-1] c09 N73-28083
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[NASA-CASE-MSC-13282-1] c05 N71-24729
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- Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
- Cable guide and restraint device for reefing tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512
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[NASA-CASE-MFS-21046-1] c14 N73-27377
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[NASA-CASE-LAR-10129-2] c15 N74-20063
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- Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454
- Development of construction block in form of container folded from flat sheet and filled with solid material for architectural purposes
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- Lightweight, rugged, inexpensive satellite battery for producing electrical power from ionosphere using electrodes with different

CONTAINERS

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[NASA-CASE-XGS-01593] c03 N70-35408
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[NASA-CASE-NPO-10123] c15 N71-24835
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[NASA-CASE-ERC-10045] c15 N71-24910
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[NASA-CASE-XNP-02500] c18 N71-27397
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[NASA-CASE-XMS-01905] c12 N71-21089
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[NASA-CASE-XNP-02039] c15 N71-15871
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[NASA-CASE-XGS-01971] c15 N71-15922
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[NASA-CASE-NPO-10070] c15 N71-27372
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[NASA-CASE-GSC-10879-1] c14 N72-25413
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[NASA-CASE-XNP-02723] c07 N70-41680
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[NASA-CASE-XLA-08646] c14 N71-17586
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[NASA-CASE-MSC-13407-1] c10 N72-20225
- CONTROL**
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[NASA-CASE-XMS-05890] c09 N71-23191
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[NASA-CASE-XNP-04134] c14 N71-23755
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[NASA-CASE-XLE-00787] c14 N71-21090
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[NASA-CASE-GSC-10366-1] c10 N71-18772
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[NASA-CASE-XNP-04780] c08 N71-19687
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[NASA-CASE-XAC-08972] c02 N71-20570
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[NASA-CASE-XAC-10019] c15 N71-23809
Controlled release device for use in launching rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043
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[NASA-CASE-XNP-07477] c09 N71-26092
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[NASA-CASE-XNP-01466] c10 N71-26434
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[NASA-CASE-XLE-09341] c12 N71-28741
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[NASA-CASE-NPO-11064] c07 N72-11150
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- [NASA-CASE-LEW-10387] c09 N72-22201
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[NASA-CASE-GSC-11211-1] c03 N72-25020
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[NASA-CASE-GSC-10786-1] c10 N72-28241
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[NASA-CASE-NPO-13114-1] c22 N73-13656
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[NASA-CASE-ARC-10278-1] c14 N73-25463
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[NASA-CASE-MSC-14245-1] c31 N73-30832
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[NASA-CASE-MPS-22022-1] c05 N74-10099
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[NASA-CASE-LAR-10688-1] c15 N74-21056
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[NASA-CASE-NPO-11951-1] c15 N74-21065
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[NASA-CASE-GSC-11789-1] c33 N75-16748
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[NASA-CASE-XMS-00583] c28 N70-38504
- CONTROL RODS**
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[NASA-CASE-XLE-00298] c22 N70-34501
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[NASA-CASE-XLA-01808] c15 N71-20740
- CONTROL STABILITY**
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[NASA-CASE-LAR-10531-1] c02 N73-13023
- CONTROL SURFACES**
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[NASA-CASE-XLE-00715] c15 N70-34859
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[NASA-CASE-XNP-02982] c31 N70-41855
- CONTROL UNITS (COMPUTERS)**
Self testing and repairing computer comprising control and diagnostic unit and rollback points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633
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[NASA-CASE-XNP-05975] c15 N69-23185
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[NASA-CASE-XLE-00715] c15 N70-34859
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[NASA-CASE-XNP-09702] c15 N71-17654
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[NASA-CASE-NPO-10416] c12 N71-27332
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[NASA-CASE-NPO-10808] c15 N71-27432
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[NASA-CASE-MSC-13587-1] c15 N73-30459
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[NASA-CASE-MSC-12178-1] c09 N71-13518
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[NASA-CASE-XAC-05333] c11 N71-22875
- CONTROLLERS**
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[NASA-CASE-XPR-00181] c21 N70-33279
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[NASA-CASE-XPR-04104] c03 N70-42073
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[NASA-CASE-IMS-07487] c15 N71-23255
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[NASA-CASE-MSC-12394-1] c03 N74-10942
- CONVECTIVE FLOW**
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[NASA-CASE-KSC-10615] c15 N73-12486
- CONVECTIVE HEAT TRANSFER**
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[NASA-CASE-NPO-10617-1] c14 N74-22095
- CONVERGENCE**
Electrical device for developing converging spherical shock waves
[NASA-CASE-MPS-20890] c14 N72-22439
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Gimballed partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-XMP-01544] c28 N70-34162
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[NASA-CASE-XLE-04857] c28 N71-23968
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[NASA-CASE-MSC-14070-1] c07 N72-27178
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[NASA-CASE-XLE-00724] c14 N70-34669
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[NASA-CASE-MPS-20333] c09 N71-13486
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[NASA-CASE-GSC-10891-1] c10 N71-26626
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[NASA-CASE-MPS-20180] c16 N72-12440
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[NASA-CASE-XNP-03796] c23 N71-15467
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[NASA-CASE-XAC-00812] c14 N71-15598
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[NASA-CASE-MPS-14114-2] c09 N71-24807
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[NASA-CASE-NPO-10467] c23 N71-26654
Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046
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[NASA-CASE-MSC-12389] c33 N71-29052
- Development of method for cooling high temperature wall members with cooling medium having high heat absorption capability
[NASA-CASE-HQN-00938] c33 N71-29053
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[NASA-CASE-XLE-00027] c33 N71-29152
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[NASA-CASE-NPO-10828] c33 N72-17948
Light shield and cooling apparatus --- high intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c15 N74-23066
Refrigerated coaxial coupling --- for maser waveguide
[NASA-CASE-NPO-13504-1] c09 N74-27689
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[NASA-CASE-LEW-11118-2] c28 N74-28232
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[NASA-CASE-LEW-12252-1] c34 N75-19579
- COORDINATES**
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[NASA-CASE-XNP-00614] c14 N70-36907
System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
- COPOLYMERS**
Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation
[NASA-CASE-XMP-02584] c06 N71-20905
Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-INP-03250] c06 N71-23500
- COPPER**
Development of method for etching copper
[NASA-CASE-XGS-06306] c17 N71-16044
Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
- COPPER COMPOUNDS**
Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MPS-20180] c16 N72-12440
- COPPER FLUORIDES**
Method to produce high purity copper fluoride by heating copper hydroxyfluoride powder and subjecting to flowing fluorine gas
[NASA-CASE-LEW-10794-1] c06 N72-17093
- CORDAGE**
Fabrication of root cord restrained fabric suit sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
- CORE STORAGE**
Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate
[NASA-CASE-ERC-10307] c08 N72-21198
- CORES**
Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c15 N74-15128
- CORRECTION**
Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
- CORRELATION DETECTION**
Phase detector with time correlation integrator for frequency multiplexed signals
[NASA-CASE-GSC-11744-1] c09 N73-23291
- CORRELATORS**
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
- CORROSION PREVENTION**
Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075
Method to prevent stress corrosion cracking in titanium alloys

- [NASA-CASE-NPO-10271] c17 N71-16393
Method and apparatus for inducing compressive stresses in pressure vessel to prevent stress corrosion
[NASA-CASE-XLA-07390] c15 N71-18616
Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408
Prevention of hydrogen embrittlement of high strength steel --- by additive potassium hydride in hydrazine
[NASA-CASE-NPO-12122-1] c27 N74-20397
- CORROSION RESISTANCE**
High strength, corrosion resistant cobalt-based alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644
Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment
[NASA-CASE-XLE-02991] c17 N71-16025
Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078
- CORRUGATING**
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c09 N74-29575
- COSINE SERIES**
Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- COSMIC DUST**
Sensor for detecting and measuring energy, velocity and direction of travel of a cosmic dust particle
[NASA-CASE-GSC-10503-1] c14 N72-20381
Cosmic dust analyzer using ion time of flight techniques to determine constituency of hypervelocity particles such as micrometeoroids
[NASA-CASE-MSC-13802-1] c30 N72-20805
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c14 N74-32883
- COUCHES**
Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
Shock absorbing articulated multiple couch assembly
[NASA-CASE-MSC-11253] c05 N71-12343
Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
- COULOMETERS**
Alkaline-type coulometer cell for primary charge control in secondary battery recharge circuits
[NASA-CASE-XGS-05434] c03 N71-20491
Development and characteristics of battery charging circuits with coulometer for control of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719
- COUNTERS**
Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910
- COUNTING CIRCUITS**
Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463
- Counter-divider circuit for accuracy and reliability in binary circuits
[NASA-CASE-XNP-00421] c09 N70-34502
Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797
Electronic counter circuit utilizing magnetic core and low power consumption
[NASA-CASE-XNP-08836] c09 N71-12515
Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432
Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897
Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891
Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2(B)] c09 N74-14941
Fine frequency measurement by coincidence detection
[NASA-CASE-MSC-14649-1] c32 N75-13124
- COUPLED MODES**
Dual mode solid state power switch
[NASA-CASE-NPS-22880-1] c33 N75-19536
- COUPLING**
Coupling device for linear shaped charge for space vehicle abort system
[NASA-CASE-XLA-00189] c33 N70-36846
Base support for expandable and contractible coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454
- COUPLING CIRCUITS**
Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-XGS-03058] c10 N71-19547
Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233
Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429
High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-NPS-21660-1] c14 N74-21017
Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520
- COUPLINGS**
Releasable coupling device designed to receive and retain matching ends of electrical connectors
[NASA-CASE-XMS-07846-1] c09 N69-21927
Stage separation using remote control release of joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490
Space vehicle stage coupling and quick release separation mechanism
[NASA-CASE-XLA-01441] c15 N70-41679
Standard coupling design for mass production
[NASA-CASE-XMS-02532] c15 N70-41808
Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-YKS-01985] c15 N71-10782
Ratchet mechanism for high speed operation at reduced backlash
[NASA-CASE-NPS-12805] c15 N71-17805
Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-NPS-20395] c15 N71-24903

- Coupling arrangement for isolating torque loads from axial, radial, and bending loads
[NASA-CASE-XLA-04897] c15 N72-22482
- Refrigerated coaxial coupling --- for maser waveguide
[NASA-CASE-NPO-13504-1] c09 N74-27689
- Preload torque limiting shaft coupling
[NASA-CASE-LAR-11398-1] c37 N75-15994
- COVERINGS**
- Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XMP-04132] c15 N69-27502
- Transparent plastic film for attaching cover glasses to silicon solar cells
[NASA-CASE-LEW-11065-1] c03 N72-11064
- CRACKING (FRACTURING)**
- Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393
- Improved silicide coatings for refractory metals employed in space shuttles and gas turbine engine components
[NASA-CASE-LEW-11179-1] c17 N73-22474
- CRASH LANDING**
- Aircraft mounted crash activated transmitter device
[NASA-CASE-MFS-16609-3] c09 N74-34647
- CREEP RUPTURE STRENGTH**
- Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026
- CRITICAL EXPERIMENTS**
- Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- CROSSED FIELDS**
- Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267
- Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
- Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562
- CROSSLINKING**
- New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579
- CRUCIBLES**
- Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483
- CRUDE OIL**
- Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499
- CRYOGENIC EQUIPMENT**
- Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NPO-10309] c15 N69-23190
- Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935
- Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-MFS-10340] c15 N71-17628
- Dual solid cryogens for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
- Reliability of automatic refilling valving device for cryogenic liquid systems
[NASA-CASE-NPO-11177] c15 N72-17453
- Dual stage check valve for cryogenic supply systems used in space flight environmental control system
[NASA-CASE-MSC-13587-1] c15 N73-30459
- CRYOGENIC FLUID STORAGE**
- Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020
- Cryogenic storage system for gases onboard spacecraft
[NASA-CASE-XMS-04390] c31 N70-41871
- Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
- Fabrication of filament wound propellant tank for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651
- Prefabricated multilayered self-evacuating insulation panels using gas with low vapor pressure at cryogenic temperatures for application to storage of cryogens
[NASA-CASE-XLE-04222] c23 N71-22881
- Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-MFS-14023] c33 N71-25351
- Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMP-05046] c33 N71-28892
- Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c14 N74-15093
- CRYOGENIC FLUIDS**
- Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
- Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
- Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
- Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
- Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-IGS-02441] c15 N70-41629
- High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
- Automatic thermal switch for improving efficiency of cooling gases below 40 K
[NASA-CASE-XNP-03796] c23 N71-15467
- Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968
- Development of apparatus for measuring thermal conductivity
[NASA-CASE-IGS-01052] c14 N71-15992
- Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
- Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443
- Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864
- Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486
- Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c15 N74-27904
- CRYOGENIC GYROSCOPES**
- Cryogenic gyroscope housing --- with annular disks for gas spin-up
[NASA-CASE-MFS-21136-1] c23 N74-18323
- CRYOGENIC MAGNETS**
- Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890
- Heat operated cryogenic electrical generator --- using liquid helium conversion
[NASA-CASE-NPO-13303-1] c03 N74-19701

CRYOGENIC ROCKET PROPELLANTS

Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782

Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802

Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042

CRYOGENIC STORAGE

Light weight plastic foam thermal insulation for cryogenic storage
[NASA-CASE-XLE-02647] c18 N71-23658

Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816

CRYOGENICS

High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XMP-02786] c17 N71-20743

Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654

CRYOLITE

Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332

CRYOSTATS

Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMP-02964] c14 N71-17659

Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XMP-10968] c14 N71-24234

Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c14 N74-15093

CRYSTAL FILTERS

Infrared tunable dye laser with nonlinear wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111

CRYSTAL GROWTH

Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015

Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466

Vapor phase growth of groups III-V compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c26 N74-27261

Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c09 N74-33740

Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054

CRYSTAL OSCILLATORS

Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NPO-10144] c14 N71-17701

CRYSTAL RECTIFIERS

Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531

CRYSTAL STRUCTURE

Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c09 N74-33740

Soft X-ray laser using crystal channels as distributed feedback cavities --- zeolites
[NASA-CASE-NPO-13532-1] c36 N75-15973

Method of growing composites of the type exhibiting the Soret effect --- improve structure of eutectic alloys, crystals
[NASA-CASE-MPS-22926-1] c25 N75-19380

CRYSTALS

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MPS-20385] c09 N71-24904

CULTURE TECHNIQUES

Development of variable angle device for positioning test tubes to permit optimum drying of culture medium
[NASA-CASE-LAR-10507-1] c11 N72-25284

Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c14 N74-10422

Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor
[NASA-CASE-LAR-11074-1] c51 N75-13502

CURRENT DENSITY

Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500

Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569

CURRENT DISTRIBUTION

Distribution of currents to circuits using electrical adaptor
[NASA-CASE-XLA-01288] c09 N69-21470

Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661

Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724

Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271

Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
[NASA-CASE-XER-11046-2] c09 N74-22864

CURRENT REGULATORS

Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318

Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNP-03128] c10 N70-41991

Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NPO-10201] c08 N71-18694

Circuit design for determining amount of photomultiplier tube light detection utilizing variable current source and dark current signals of opposite polarity
[NASA-CASE-XMS-03478] c14 N71-21040

Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316

Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800

Automatic power supply circuit design for driving inductive loads and minimizing power consumption including solenoid example
[NASA-CASE-NPO-10716] c09 N71-24892

Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531

Current regulating voltage divider design with load current shunting
[NASA-CASE-MPS-20935] c09 N71-34212

Circuit for monitoring power supply by ripple current indication
[NASA-CASE-KSC-10162] c09 N72-11225

A dc regulator having feedforward control
[NASA-CASE-NPO-13481-1] c09 N74-32675

Inrush current limiter --- control circuit
[NASA-CASE-GSC-11789-1] c33 N75-16748

CURVATURE

Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XMP-01083] c15 N71-22723

Two degree inverted flexure from single block of material
[NASA-CASE-ARC-10345-1] c15 N73-12488

CURVE FITTING

Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
[NASA-CASE-XMS-01554] c10 N71-10578

CURVED PANELS

Fabrication of curved reflector segments for solar mirror
[NASA-CASE-XLE-08917] c15 N71-15597

Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMP-09422] c07 N71-19436

- Space erectable rollup solar array of arcuate solar panels furled on tapered drum for spacecraft storage during launch
[NASA-CASE-NPO-10188] c03 N71-20273
- Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836
- CUTTERS**
- Description of device for aligning stacked sheets of paper for repetitive cutting
[NASA-CASE-XPS-04178] c15 N74-22798
- Portable cutting machine for piping weld preparation
[NASA-CASE-XKS-07953] c15 N71-26134
- Precision surface cutter for screen circuit negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485
- Adjustable hole cutter for forming circular openings
[NASA-CASE-MFS-22649-1] c15 N73-32376
- Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-MFS-21485-1] c15 N74-25968
- Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c15 N74-27905
- CUTTING**
- Ellipsograph for describing and cutting ellipses with minimal axial dimensions
[NASA-CASE-XLA-03102] c14 N71-21079
- CYCLES**
- Pneumatic system for cyclic control of fluid flow in pneumatic device
[NASA-CASE-XMS-04843] c03 N69-21469
- Multistage feedback shift register with states decomposable into cycles of equal length
[NASA-CASE-NPO-11082] c08 N72-22167
- CYCLIC HYDROCARBONS**
- Para-benzoquinone dioxime and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
- CYCLIC LOADS**
- Automatic controlled thermal fatigue testing apparatus
[NASA-CASE-XLA-02059] c33 N71-24276
- Development of device for simulating cyclic thermal loading of flexible materials by application of mechanical stresses and deformations
[NASA-CASE-LAR-10270-1] c32 N72-25877
- Material testing system with load sensor for applying and measuring cyclic tensile and compressive loads to test specimens
[NASA-CASE-MFS-20673] c14 N73-20476
- CYCLOTRON RADIATION**
- Apparatus for producing high purity I-123 from Xe-123 by bombarding tellurium target with cyclotron beam
[NASA-CASE-LEW-10518-2] c24 N72-28714
- CYLINDRICAL ANTENNAS**
- Variable beamwidth antenna --- with multiple beam, variable feed system
[NASA-CASE-GSC-11862-1] c09 N74-32674
- CYLINDRICAL BODIES**
- Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c14 N74-20009
- D**
- DAMPING**
- Dynamic precession damping of spin-stabilized vehicles by using rate gyroscope and angular accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295
- Slosh damping method for liquid rocket propellant tanks
[NASA-CASE-XMP-00658] c12 N70-38997
- Utilization of momentum devices for forming attitude control and damping system for spacecraft
[NASA-CASE-XLA-02551] c21 N71-21708
- Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
- Nutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513
- Development of electrical circuit for suppressing oscillations across inductor operating in resonant mode
[NASA-CASE-ERC-10403-1] c10 N73-26228
- DATA ACQUISITION**
- Conversion system for increasing resolution of analog to digital converters
[NASA-CASE-XAC-00404] c08 N70-40125
- Development of telemetry system for position location and data acquisition
[NASA-CASE-GSC-10083-1] c30 N71-16090
- Data acquisition system for converting displayed analog signal to digital values
[NASA-CASE-NPO-10344] c10 N71-26544
- Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255
- Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c32 N75-15854
- DATA COLLECTION PLATFORMS**
- Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007
- DATA COMPRESSION**
- Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506
- Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288
- Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
- Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171
- Data reduction and transmission system for TV PCM data
[NASA-CASE-NPO-11243] c07 N72-20154
- Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c07 N74-19788
- DATA CONVERTERS**
- Logarithmic converter for compressing 19-digit binary input number to 8-digit output
[NASA-CASE-XLA-00471] c08 N70-34778
- Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907
- Analog signal to discrete time converter
[NASA-CASE-ERC-10048] c09 N72-25251
- Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
- Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c14 N74-11283
- DATA LINKS**
- Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NPO-11572] c07 N73-16121
- Automatic accounting system for transfer of data from terminals to computer
[NASA-CASE-NPO-11456] c08 N73-26176
- Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c62 N75-12652
- DATA PROCESSING**
- Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XFR-00756] c02 N71-13421
- Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917
- Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255
- Digital data handling circuits for pulse amplifiers
[NASA-CASE-XNP-01068] c10 N71-28739
- Synchronized digital communication system
[NASA-CASE-XNP-03623] c09 N73-28084

DATA PROCESSING EQUIPMENT

SUBJECT INDEX

Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c14 N74-11283

DATA PROCESSING EQUIPMENT

Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494

Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals
[NASA-CASE-XAC-04030] c10 N71-19472

Development and characteristics of rate augmented digital to analog converter for computed time-dependent data
[NASA-CASE-XLA-07828] c08 N71-27057

Data processor with plural register stages for selectively interconnecting with each other to effect multiplicity of operations
[NASA-CASE-GSC-10186] c08 N71-33110

Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NPO-11358] c07 N72-25172

Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NPO-11371] c08 N73-12177

Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187

Automatic accounting system for transfer of data from terminals to computer
[NASA-CASE-NPO-11456] c08 N73-26176

DATA RECORDERS

Description of system for recording and reading out data related to distribution of occurrence of plurality of events
[NASA-CASE-XNP-04067] c08 N71-22707

Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119

Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c07 N74-15831

DATA RECORDING

System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-XGS-01021] c08 N71-21042

Description of system for recording and reading out data related to distribution of occurrence of plurality of events
[NASA-CASE-XNP-04067] c08 N71-22707

Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710

Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866

Apparatus for on-film optical recording of camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431

Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c14 N74-11283

Holography utilizing surface plasmon resonances
[NASA-CASE-MPS-22040-1] c14 N74-26946

DATA REDUCTION

System for storing histogram data in optimum number of elements
[NASA-CASE-XNP-09785] c08 N69-21928

Respiration analyzing method and apparatus for determining subjects oxygen consumption in aerospace environments
[NASA-CASE-XPR-08403] c05 N71-11202

Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506

Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288

Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435

Description of system for recording and reading out data related to distribution of occurrence of plurality of events

[NASA-CASE-XNP-04067] c08 N71-22707

Apparatus with sunning network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171

Data reduction and transmission system for TV PCM data
[NASA-CASE-NPO-11243] c07 N72-20154

Data compression using decreasing slope threshold test and digital techniques
[NASA-CASE-NPO-11630] c08 N72-33172

DATA RETRIEVAL

Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XNP-05835] c08 N71-12504

Asynchronous, multiplexing, single line transmission and recovery data system --- for satellite use
[NASA-CASE-NPO-13321-1] c07 N74-19806

DATA SAMPLING

Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026

Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622

Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742

Apparatus with sunning network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171

DATA SMOOTHING

Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964

DATA STORAGE

Data handling based on source significance, storage availability, and data received from source
[NASA-CASE-XNP-04162-1] c08 N70-34675

Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XNP-05835] c08 N71-12504

Tape guidance system for multichannel digital recording system
[NASA-CASE-XNP-09453] c08 N71-19420

Event recorder with constant speed motor which rotates recording disk
[NASA-CASE-XLA-01832] c14 N71-21006

System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-XGS-01021] c08 N71-21042

Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710

Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131

Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-NPO-11481] c21 N73-13644

Data storage, image tube type
[NASA-CASE-MSC-14053-1] c08 N74-12888

DATA SYSTEMS

Data handling based on source significance, storage availability, and data received from source
[NASA-CASE-XNP-04162-1] c08 N70-34675

Development and characteristics of rate augmented digital to analog converter for computed time-dependent data
[NASA-CASE-XLA-07828] c08 N71-27057

Computer interface system --- using asynchronous clocks
[NASA-CASE-NPO-13428-1] c08 N74-30549

Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c07 N74-32598

DATA TRANSMISSION

Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333

- Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
[NASA-CASE-XNP-00911] c08 N70-41961
- Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506
- Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288
- Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
- Plural channel data transmission system with quadrature modulation and complementary demodulation
[NASA-CASE-XAC-06302] c08 N71-19763
- Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
- Frequency shift keying apparatus for use with pulse code modulation data transmission system
[NASA-CASE-XGS-01537] c07 N71-23405
- Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741
- Data reduction and transmission system for TV PCM data
[NASA-CASE-NPO-11243] c07 N72-20154
- Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NPO-11572] c07 N73-16121
- Telemetry and transmission system with programmed sampling and multiplexing
[NASA-CASE-GSC-11388-1] c07 N73-24187
- Automatic accounting system for transfer of data from terminals to computer
[NASA-CASE-NPO-11456] c08 N73-26176
- Differential pulse code modulation
[NASA-CASE-XSC-12506-1] c32 N75-19480
- System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519
- DECAY RATES**
- Solar sensor with coarse and fine sensing elements for matching preirradiated cells on degradation rates
[NASA-CASE-XLA-01584] c14 N71-23269
- DECELERATION**
- Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-XNP-00641] c31 N70-36410
- Device for use in descending spacecraft as altitude sensor for actuating deceleration retrorockets
[NASA-CASE-XMS-03792] c14 N70-41812
- Development and characteristics of hot air balloon deceleration and recovery system
[NASA-CASE-XLA-06824-2] c02 N71-11037
- Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
[NASA-CASE-XNP-06515] c14 N71-23227
- DECIMALS**
- Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-XSC-10595] c08 N73-12176
- DECISION MAKING**
- Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-XSC-14070-1] c07 N74-32598
- DECODERS**
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-NPO-10342] c10 N71-33407
- Learning decoders for decoding compatible convolutional codes
[NASA-CASE-XSC-14070-1] c07 N72-27178
- DECODING**
- Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741
- Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NPO-11371] c08 N73-12177
- Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-XSC-14070-1] c07 N74-32598
- DECONTAMINATION**
- Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499
- Heat exchanger and decontamination system for multistage refrigeration unit
[NASA-CASE-NPO-10634] c23 N72-25619
- DEEP SPACE NETWORK**
- Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229
- DEFLECTION**
- Bipropellant injector with pair of concave deflector plates
[NASA-CASE-XNP-09461] c28 N72-23809
- DEFLECTORS**
- Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788
- Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825
- Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-XLE-10689-1] c28 N71-26173
- DEFOCUSING**
- Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605
- DEFORMATION**
- Deformation measuring apparatus with feedback control for arbitrarily shaped structures
[NASA-CASE-LAR-10098] c32 N71-26681
- Development of device for simulating cyclic thermal loading of flexible materials by application of mechanical stresses and deformations
[NASA-CASE-LAR-10270-1] c32 N72-25877
- DEFORMETERS**
- Development of strain gage mounting assembly for amplifying measurable deformation applied to strain gage
[NASA-CASE-NPO-13170-1] c14 N73-28495
- DEGREES OF FREEDOM**
- Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746
- Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
- Kinesthetic control simulator --- for pilot training
[NASA-CASE-LAR-10276-1] c09 N75-15662
- DEHUMIDIFICATION**
- Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
- DEHYDRATED FOOD**
- Rice preparation process consisting of cooking, two freezing-thawing cycles, and then freeze drying
[NASA-CASE-XSC-13540-1] c05 N72-33096
- DELAY CIRCUITS**
- Development of pulsed differential comparator circuit
[NASA-CASE-XLE-03804] c10 N71-19471
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- DELAY LINES**
- Development and characteristics of solid state acoustic variable time delay line using direct current voltage and radio frequency pulses
[NASA-CASE-XRC-10032] c10 N71-25900

DELTA MODULATION

SUBJECT INDEX

- DELTA MODULATION**
Multifunction audio digitizer --- producing direct delta and pulse code modulation
[NASA-CASE-MSC-13855-1] c07 N74-17885
- DELTA WINGS**
Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
- DEMAGNETIZATION**
Tumbling motion system for object demagnetization
[NASA-CASE-XGS-02437] c15 N69-21472
- DEMODULATION**
Plural channel data transmission system with quadrature modulation and complementary demodulation
[NASA-CASE-XAC-06302] c08 N71-19763
Restoration and improvement of demodulated facsimile video signals
[NASA-CASE-GSC-10185-1] c07 N72-12081
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Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
Frequency shift keyed demodulator - circuit diagrams
[NASA-CASE-XGS-02889] c07 N71-11282
Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-XNP-01160] c07 N71-11298
Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals
[NASA-CASE-XAC-04030] c10 N71-19472
Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696
Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-PRC-10072-1] c09 N74-14939
- DENSITOMETERS**
Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618
Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
Ultrasonic bone densitometer
[NASA-CASE-MPS-20994-1] c35 N75-12271
- DENSITY DISTRIBUTION**
Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-XLE-00519] c28 N70-41576
Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c35 N75-11307
- DENSITY MEASUREMENT**
Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618
Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
Determining particle density using known material Hugoniot curves
[NASA-CASE-LAR-11059-1] c76 N75-12810
- DENTISTRY**
Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-ERC-10338] c04 N72-33072
- DEPLOYMENT**
Extendable, self-deploying boom apparatus
[NASA-CASE-GSC-10566-1] c15 N72-18477
Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
[NASA-CASE-NPO-10883] c31 N72-22874
- DEPOSITION**
Means and methods of depositing thin films on substrates
[NASA-CASE-XNP-00595] c15 N70-34967
Dual wavelength system for monitoring film deposition
[NASA-CASE-MPS-20675] c26 N73-26751
Production of pure metals
[NASA-CASE-LEW-10906-1] c06 N74-30502
- DESALINIZATION**
Water purification process
[NASA-CASE-ARC-10643-2] c51 N75-13506
- DETECTION**
Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569
Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
Metal detection system with electromagnetic transmitter with single coil and receiver with single coil
[NASA-CASE-ARC-10265-1] c10 N72-28240
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c16 N74-15145
Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612
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[NASA-CASE-XLA-00936] c14 N71-14996
Development of large area micrometeoroid impact detector panels
[NASA-CASE-XLA-05906] c31 N71-16221
Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-XNP-06531] c14 N71-17575
Electro-optical detector for determining position of light source
[NASA-CASE-XNP-01059] c23 N71-21821
Method for locating leaks in hermetically sealed containers
[NASA-CASE-ERC-10045] c15 N71-24910
Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334
Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-MPS-15063] c14 N72-25412
Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
[NASA-CASE-LAR-10483-1] c14 N73-32327
Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c14 N74-20019
Deployable pressurized cell structure for a micrometeoroid detector
[NASA-CASE-LAR-10295-1] c15 N74-21062
Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c14 N74-32888
- DETERGENTS**
Anti-fog composition --- for prevention of fogging on surfaces such as space helmet, visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834
- DETONATION**
Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c33 N74-27425
- DETONATION WAVES**
Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XNP-06926] c28 N71-22983
- DEUTERIUM**
Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146
Deuterium pass through target --- for neutron generating
[NASA-CASE-LEW-11866-1] c11 N74-32719
- DIAGNOSIS**
Apparatus for producing high purity I-123 --- for thyroid measurement
[NASA-CASE-LEW-10518-3] c15 N74-10476

DIAGRAMS

Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-MPS-20407] c09 N73-19235

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Preparation of elastomeric diamine silazane polymers
[NASA-CASE-XNP-04133] c06 N71-20717
Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XNP-03074] c06 N71-24740
Synthesis of siloxane containing epoxide and diamine polymers
[NASA-CASE-MPS-13994-2] c06 N72-25148
Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980

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Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
[NASA-CASE-MPS-20698] c15 N72-20446
Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-MPS-20698-2] c15 N73-19457

DIAPHRAGMS (MECHANICS)

Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
Reinforcing beam system for highly flexible diaphragms in valves or pressure switches
[NASA-CASE-XNP-01962] c32 N70-41370
Flexible rocket motor nozzle closure device to aid ignition and protect rocket chamber from foreign objects
[NASA-CASE-XLA-02651] c28 N70-41967
Knife structure for controlling rupture of shock tube diaphragms
[NASA-CASE-XAC-00731] c11 N71-15960
Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
Design and development of inertia diaphragm pressure transducer
[NASA-CASE-XAC-02981] c14 N71-21072
Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811
Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NPO-11433] c18 N71-31140
Development of differential pressure control system using motion of mechanical diaphragms to operate electric switch
[NASA-CASE-MPS-14216] c14 N73-13418

DIASTOLIC PRESSURE

Automatic system for measuring and monitoring systolic and diastolic blood pressure in humans
[NASA-CASE-MSC-13999-1] c05 N72-25142

DIATOMIC GASES

Laser utilizing infrared rotation transitions of diatomic gas for production of different wavelengths
[NASA-CASE-ARC-10370-1] c16 N72-10432

DICHROISM

Dichroic plate
[NASA-CASE-NPO-13506-1] c09 N74-27690

DIELECTRIC PROPERTIES

Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
[NASA-CASE-MPS-21629] c14 N72-22442
Fine particulate capture device
[NASA-CASE-LEW-11583-1] c15 N74-13199

DIELECTRICS

Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267
Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-XNP-09750] c14 N69-39937
Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-XNP-00517] c03 N70-34157
Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield

[NASA-CASE-XMS-04312] c07 N71-22984

Broadband microwave waveguide window to compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808

Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135

Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065

Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials
[NASA-CASE-XER-08476-1] c26 N72-17820

Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762

Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c07 N74-11000

Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c35 N75-11307

Electrostatic measurement system --- for contact-electrifying a dielectric
[NASA-CASE-MPS-22129-1] c33 N75-18477

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Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811
Development and characteristics of frusto-conical die nib for extrusion of refractory metals
[NASA-CASE-XLE-06773] c15 N71-23817

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Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270

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Temperature compensated solid state differential amplifier with application in bioinstrumentation circuits
[NASA-CASE-XAC-00435] c09 N70-35440
Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772

DIFFERENTIAL INTERFEROMETRY

Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XNP-05844] c14 N71-17587

DIFFERENTIAL PRESSURE

Relief valve to permit slow and fast bleeding rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924
Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XNP-04132] c15 N69-27502

DIFFRACTION

Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868

DIFFRACTION PATTERNS

Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215

DIFFRACTOMETERS

Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XNP-05231] c14 N73-28491

DIFFUSERS

Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538

DIFFUSION

Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
Transmitting and reflecting diffuser --- for ultraviolet light

DIFFUSION PUMPS

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[NASA-CASE-LAR-10385-2] c23 N74-13436

DIFFUSION PUMPS

Oil trap for preventing diffusion pump backstreaming into evacuated system [NASA-CASE-GSC-10518-1] c15 N72-22489

Programmable physiological infusion [NASA-CASE-ARC-10447-1] c05 N74-22771

DIFFUSION WELDING

Diffusion bonded graphite reinforced aluminum composites [NASA-CASE-MPS-21077] c18 N71-34502

Method for diffusion welding dissimilar metals in vacuum chamber [NASA-CASE-GSC-10303] c15 N72-22487

Reinforced PEP Teflon composite material diffusion bonded to metal substrate [NASA-CASE-MPS-20482] c15 N72-22492

Two-step diffusion welding process of unrecrystallized alloys [NASA-CASE-LBW-11388-1] c15 N73-32358

Method of fluxless brazing and diffusion bonding of aluminum containing components [NASA-CASE-MSC-14435-1] c15 N74-20071

DIGITAL COMMAND SYSTEMS

Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems [NASA-CASE-XGS-02317] c09 N71-23525

System for maintaining motor at predetermined speed using digital pulses [NASA-CASE-XNP-06892] c09 N71-24805

Digital filter for reducing jitter in digital control systems [NASA-CASE-NPO-11088] c08 N71-29034

DIGITAL COMPUTERS

Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning [NASA-CASE-LAR-10590-1] c15 N70-26819

Binary number sorter for arranging numbers in order of magnitude [NASA-CASE-NPO-10112] c08 N71-12502

Binary sequence detector with few memory elements and minimized logic circuit complexity [NASA-CASE-XNP-05415] c08 N71-12505

Digital computer system for automatic prelaunch checkout of spacecraft [NASA-CASE-XKS-08012-2] c31 N71-15566

Description of error correcting methods for use with digital data computers and apparatus for encoding and decoding digital data [NASA-CASE-XNP-02748] c08 N71-22749

Serial digital decoder design with square circuit matrix and serial memory storage units [NASA-CASE-NPO-10150] c08 N71-24650

Digital magnetic core memory with sensing amplifier circuits [NASA-CASE-XNP-01012] c08 N71-28925

Redundant memory for enhanced reliability of digital data processing system [NASA-CASE-GSC-10564] c10 N71-29135

Digital converter for scaling binary number to binary coded decimal number of higher multiple [NASA-CASE-KSC-10595] c08 N73-12176

Fault-tolerant clock apparatus for use in digital logic systems which maintains output pulses during component failure [NASA-CASE-MSC-12531-1] c14 N73-22386

DIGITAL DATA

Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication [NASA-CASE-XNP-00911] c08 N70-41961

Tape guidance system for multichannel digital recording system [NASA-CASE-XNP-09453] c08 N71-19420

Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback [NASA-CASE-XGS-01812] c07 N71-23001

Digital data handling circuits for pulse amplifiers [NASA-CASE-XNP-01068] c10 N71-28739

Bit synchronization system using digital data transition tracking phased locked loop [NASA-CASE-NPO-10844] c07 N72-20140

Control and information system for digital telemetry data using analog converter to digitize sensed parameter values

[NASA-CASE-NPO-11016] c08 N72-31226

Development and characteristics for automatically displaying digits in any desired order using optical techniques [NASA-CASE-XKS-00348] c09 N73-14215

DIGITAL FILTERS

Design and development of signal detection and tracking apparatus [NASA-CASE-IGS-03502] c10 N71-20852

Digital filter for reducing jitter in digital control systems [NASA-CASE-NPO-11088] c08 N71-29034

Nonrecursive counting digital filter containing shift register [NASA-CASE-NPO-11821-1] c08 N73-26175

Filtering device --- removing noise from communication signals [NASA-CASE-MPS-22729-1] c32 N75-14011

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TV camera output signal control system for digital spacecraft communication [NASA-CASE-XNP-01472] c14 N70-41807

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Light sensitive digital aspect sensor for attitude control of earth satellites or space probes [NASA-CASE-XGS-00359] c14 N70-34158

Circuit diagram and operation of full binary adder [NASA-CASE-XGS-00689] c08 N70-34787

Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback [NASA-CASE-XGS-01812] c07 N71-23001

Reliable magnetic core circuit apparatus with application in selection matrices for digital memories [NASA-CASE-XNP-01318] c10 N71-23033

Noninterruptable digital counter circuit design with display device for pulse frequency modulation [NASA-CASE-XNP-09759] c08 N71-24891

Digital memory system with multiple switch cores for driving each word location [NASA-CASE-NPO-01466] c10 N71-26434

Digital quasi-exponential function generator [NASA-CASE-NPO-11130] c08 N72-20176

Digital function generator for generating any arbitrary single valued function [NASA-CASE-NPO-11104] c08 N72-22165

Digital video system for displaying image and alphanumeric data on cathode ray tube [NASA-CASE-NPO-11342] c09 N72-25248

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Low phase noise frequency divider for use with deep space network communication system [NASA-CASE-NPO-11569] c10 N73-26229

Synchronized digital communication system [NASA-CASE-XNP-03623] c09 N73-28084

Anti-multipath digital signal detector [NASA-CASE-LAR-11379-1] c07 N74-11005

Digital second-order phase-locked loop [NASA-CASE-NPO-11905-1] c08 N74-12887

Digital transmitter for data bus communications system [NASA-CASE-MSC-14558-1] c07 N74-17888

Digital controller for a Baum folding machine --- providing automatic counting and machine shutoff [NASA-CASE-LAR-10688-1] c15 N74-21056

Automatic character skew and spacing checking network --- for digital tape drive systems [NASA-CASE-GSC-11925-1] c35 N75-16792

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Describing frequency discriminator using digital logic circuits and supplying single binary output signal [NASA-CASE-MPS-14322] c08 N71-18692

Constructing Exclusive-Or digital logic circuit in single module [NASA-CASE-XLA-07732] c08 N71-18751

Horizon sensor design with digital sampling of spaced radiation-compensated thermopile

- infrared detectors
[NASA-CASE-XNP-06957] c14 N71-21088
- Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
- Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XKS-00348] c09 N73-14215
- Apparatus and digital technique for coding rate data
[NASA-CASE-LAR-10128-1] c08 N73-20217
- Digital phase-locked loop for accumulator output signal phase-locked to input signal
[NASA-CASE-GSC-11623-1] c10 N73-31202
- Digital communication system
[NASA-CASE-MSC-13912-1] c07 N74-30524
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[NASA-CASE-XLA-07828] c08 N71-27057
- Digital to analog converter with parallel input/output memory device
[NASA-CASE-KSC-10397] c08 N72-25206
- Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c08 N73-32081
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[NASA-CASE-MSC-12458-1] c08 N73-32081
- DIHYDRIDES**
Ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-MPS-22356-1] c06 N74-29479
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[NASA-CASE-MPS-10512] c06 N73-30099
- Preparation of stable polyurethane polymer by reacting polymer with diisocyanate
[NASA-CASE-MPS-10506] c06 N73-30100
- Preparation of polyurethane polymer by reacting hydroxy polyformal with organic diisocyanate
[NASA-CASE-MPS-10509] c06 N73-30103
- DIODES**
Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material
[NASA-CASE-XKS-03381] c09 N71-22796
- Maintaining current flow through solar cells with open connection using shunting diode
[NASA-CASE-XLE-04535] c03 N71-23354
- Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
- Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214
- Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150
- Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2(B)] c09 N74-14941
- High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c07 N74-22814
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[NASA-CASE-ERC-10214] c09 N72-31235
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[NASA-CASE-XGS-03429] c03 N69-21330
- Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
- Thermionic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NPO-10404] c03 N71-12255
- Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723
- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
- Frequency control network for current feedback oscillators converting dc voltage to ac or higher dc voltages
[NASA-CASE-GSC-10041-1] c10 N71-19418
- Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XHF-14301] c09 N71-23188
- Converting output of positive dc voltage source to negative dc voltage across load with common reference point
[NASA-CASE-XHF-08217] c03 N71-23239
- Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
- Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MPS-20385] c09 N71-24904
- Inverters for changing direct current to alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
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[NASA-CASE-XNP-07477] c09 N71-26092
- Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MPS-14610] c09 N71-28886
- High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
- Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203
- Dc to ac to dc converter with transistor driven synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
- Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476
- Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MSC-12396-1] c03 N73-31988
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c09 N74-21851
- Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
[NASA-CASE-XER-11046-2] c09 N74-22864
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[NASA-CASE-XNP-08217] c03 N71-23239
- Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893
- Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
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[NASA-CASE-XKS-08485] c07 N71-19493
- Tracking antenna system with array for synchronous satellite or ground based radar
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[NASA-CASE-NPO-10173] c15 N71-24696
- Variable beamwidth antenna --- with multiple beam, variable feed system
[NASA-CASE-GSC-11862-1] c09 N74-32674
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[NASA-CASE-XNP-01544] c28 N70-34162
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[NASA-CASE-MPS-21309-1] c15 N74-18125
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[NASA-CASE-XLA-00326] c03 N70-34667
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[NASA-CASE-XLA-00711] c03 N71-12258
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[NASA-CASE-XLA-01396] c03 N71-12259
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[NASA-CASE-XLA-01141] c15 N71-13789
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[NASA-CASE-XNP-06914] c15 N71-21489
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[NASA-CASE-MSC-11849-1] c15 N72-22488
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[NASA-CASE-MPS-22323-1] c15 N74-26988
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[NASA-CASE-XNP-08274] c10 N71-13537
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[NASA-CASE-MPS-14322] c08 N71-18692
- Circuit design for determining amount of photomultiplier tube light detection utilizing variable current source and dark current signals of opposite polarity
[NASA-CASE-XMS-03478] c14 N71-21040
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[NASA-CASE-MPS-20829] c12 N72-21310
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[NASA-CASE-MPS-21115-1] c05 N74-12779
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[NASA-CASE-MPS-21163-1] c05 N74-17853
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[NASA-CASE-XLA-00781] c09 N71-22999
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[NASA-CASE-XLA-09346] c15 N71-28740
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[NASA-CASE-NPO-10778] c14 N72-11364
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- Integrated time shared instrumentation display for aerospace vehicle simulators
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- Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XPR-00756] c02 N71-13421
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[NASA-CASE-ERC-10031] c12 N71-18603
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[NASA-CASE-XGS-04987] c08 N71-20571
- Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882
- Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175
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[NASA-CASE-XKS-06167] c08 N71-24890
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[NASA-CASE-XNP-09759] c08 N71-24891
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[NASA-CASE-NPO-10344] c10 N71-26544

- Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519
- System for digitizing graphic displays
[NASA-CASE-NPO-10745] c08 N72-22164
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[NASA-CASE-NPO-11342] c09 N72-25248
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[NASA-CASE-MSC-12372-1] c31 N72-25842
- Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XKS-00348] c09 N73-14215
- Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474
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[NASA-CASE-MSC-14180-1] c05 N73-22045
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[NASA-CASE-GSC-11690-1] c14 N73-28499
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[NASA-CASE-MSC-13746-1] c10 N73-32143
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[NASA-CASE-PRC-10071-1] c07 N74-20813
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[NASA-CASE-ARC-10806] c14 N74-27872
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[NASA-CASE-LAR-10195-1] c15 N73-19458
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[NASA-CASE-NPO-11194] c08 N72-25209
- Apparatus for determining distance to lighting strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175
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[NASA-CASE-XMS-04533] c15 N71-23086
- Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184
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[NASA-CASE-MSC-12332-1] c15 N72-15476
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[NASA-CASE-XNP-08124-2] c06 N73-13129
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[NASA-CASE-GSC-11849-1] c09 N74-22873
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[NASA-CASE-ERC-10180-1] c08 N74-20836
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- [NASA-CASE-XLA-02705] c08 N71-15908
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[NASA-CASE-MSC-12086-1] c05 N71-12345
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[NASA-CASE-XGS-02749] c07 N69-39978
- Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-NFS-20386] c21 N71-19212
- Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10Q87-4] c07 N73-20174
- Doppler shift system --- system for measuring velocities of radiating particles
[NASA-CASE-HQN-10740-1] c24 N74-19310
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[NASA-CASE-XLA-03645] c14 N71-20430
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[NASA-CASE-XLA-01220] c02 N70-41863
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[NASA-CASE-LAR-10776-1] c02 N74-10034
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[NASA-CASE-XLA-00113] c14 N70-33386
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[NASA-CASE-XLA-00755] c01 N71-13410
- Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411
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[NASA-CASE-XLA-01530] c14 N71-23092
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[NASA-CASE-YAC-00139] c02 N70-34856
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[NASA-CASE-XLA-01583] c02 N70-36825
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[NASA-CASE-XMS-05562-1] c09 N69-39986
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[NASA-CASE-XLA-00183] c14 N70-40239
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[NASA-CASE-XNP-01412] c15 N70-42034
- DRILLS**
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Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator

ELECTROLYTES

[NASA-CASE-XGS-08729] c28 N71-14044
Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism

[NASA-CASE-XLE-01645] c03 N71-20904

ELECTROLYTES

Apparatus for measuring polymer membrane expansion in electrochemical cells

[NASA-CASE-XGS-03865] c14 N69-21363

Electrolytically regenerative hydrogen-oxygen fuel cells

[NASA-CASE-XLE-04526] c03 N71-11052

Sealed electrochemical cell with flexible casing for varying electrolyte level in cell

[NASA-CASE-XGS-01513] c03 N71-23336

Compressible electrolyte saturated sponge electrode for biomedical applications

[NASA-CASE-MSC-13648] c05 N72-27103

ELECTROLYTIC CELLS

Heat activated cell with aluminum anode

[NASA-CASE-LEW-11359-2] c03 N72-20034

Actuator operated by electrolytic drive gas generator and evacuator

[NASA-CASE-NPO-11369] c15 N73-13467

Electrolytic cell design

[NASA-CASE-LAR-11042-1] c03 N74-29416

ELECTROMAGNETIC FIELDS

Tumbling motion system for object demagnetization

[NASA-CASE-XGS-02437] c15 N69-21472

Device for high vacuum film deposition with electromagnetic ion steering

[NASA-CASE-NPO-10331] c09 N71-26701

Metal detection system with electromagnetic transmitter with single coil and receiver with single coil

[NASA-CASE-ARC-10265-1] c10 N72-28240

Low power electromagnetic flowmeter system producing zero output signal for zero flow

[NASA-CASE-ARC-10362-1] c14 N73-32326

Electromagnetic flow rate meter --- for liquid metals

[NASA-CASE-LEW-10981-1] c14 N74-21018

ELECTROMAGNETIC HAMMERS

Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces

[NASA-CASE-XMP-05114] c15 N71-17650

Portable magnetomotive hammer for metal working

[NASA-CASE-XMP-03793] c15 N71-24833

ELECTROMAGNETIC INTERFERENCE

Sealed housing for protecting electronic equipment against electromagnetic interference

[NASA-CASE-BSC-12168-1] c09 N71-18600

ELECTROMAGNETIC MEASUREMENT

Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites

[NASA-CASE-XGS-02608] c07 N70-41678

ELECTROMAGNETIC NOISE

Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers

[NASA-CASE-LAR-10253-1] c09 N72-25258

Audio equipment for removing impulse noise from audio signals

[NASA-CASE-NPO-11631] c10 N73-12244

ELECTROMAGNETIC PUMPS

Multiducted electromagnetic pump for conductive liquids

[NASA-CASE-NPO-10755] c15 N71-27084

ELECTROMAGNETIC RADIATION

Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time

[NASA-CASE-XMS-00893] c07 N70-40063

Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits

[NASA-CASE-XNP-02140] c09 N71-23097

Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks

[NASA-CASE-GSC-10021-1] c09 N71-24595

Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna

[NASA-CASE-XLA-10772] c07 N71-28980

SUBJECT INDEX

Characteristics of microwave antenna with conical reflectors to generate plane wave front

[NASA-CASE-NPO-11661] c07 N73-14130

Method and apparatus for measuring electromagnetic radiation

[NASA-CASE-LEW-11159-1] c14 N73-28488

Resistive anode image converter

[NASA-CASE-BQN-10876-1] c35 N75-19621

ELECTROMAGNETIC SHIELDING

Shielded flat conductor cable fabricated by electroless and electrolytic plating

[NASA-CASE-MFS-13687] c09 N71-28691

ELECTROMAGNETIC WAVE FILTERS

Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light

[NASA-CASE-NPO-10417] c16 N71-33410

ELECTROMAGNETIC WAVE TRANSMISSION

Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites

[NASA-CASE-XGS-02608] c07 N70-41678

ELECTROMAGNETISM

Electromagnetic braking arrangement for controlling rotor rotation in electric motor

[NASA-CASE-XNP-06936] c15 N71-24695

ELECTROMAGNETS

Oscillatory electromagnetic mirror drive system for horizon scanners

[NASA-CASE-XLA-03724] c14 N69-27461

Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss

[NASA-CASE-XNP-01951] c09 N70-41929

Magnetic element position sensing device, using misaligned electromagnets

[NASA-CASE-XGS-07514] c23 N71-16099

Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge

[NASA-CASE-LAR-10372] c09 N71-18599

Magnetic bearing --- for supplying magnetic fluxes

[NASA-CASE-GSC-11079-1] c37 N75-18574

ELECTROMECHANICAL DEVICES

Electromechanical actuator and its use in rocket thrust control valve

[NASA-CASE-XNP-05975] c15 N69-23185

Power controlled bimetallic electromechanical actuator for accurate, timely, and reliable response to remote control signal

[NASA-CASE-XNP-09776] c09 N69-39929

Electro-mechanical circuit for converting floating intelligence signal to common electrically grounded intelligence recorder

[NASA-CASE-XAC-00086] c09 N70-33182

Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer

[NASA-CASE-XGS-03532] c14 N71-17627

Mechanical actuator wherein linear motion changes to rotational motion

[NASA-CASE-XGS-04548] c15 N71-24045

Solid state force measuring electromechanical transducers made of piezoresistive materials

[NASA-CASE-ERC-10088] c26 N71-25490

Electromechanical control actuator system using double differential screws

[NASA-CASE-ERC-10022] c15 N71-26635

Miniature electromechanical junction transducer operating on piezoelectric effect and utilizing epoxy for stress coupling component

[NASA-CASE-ERC-10087] c14 N71-27334

Service life of electromechanical device for generating sine/cosine functions

[NASA-CASE-LAR-10503-1] c09 N72-21248

Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals

[NASA-CASE-NPO-11738-1] c09 N73-30185

Brushless electromechanical generator for sine and cosine functions

[NASA-CASE-LAR-11389-1] c09 N73-32121

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Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude

[NASA-CASE-XAC-02807] c09 N71-23021

ELECTROMOTIVE FORCES

Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579

ELECTRON BEAM WELDING

Portable electron beam welding chamber
[NASA-CASE-LEW-11531] c15 N71-14932
Development of device to prevent high voltage
arcing in electron beam welding
[NASA-CASE-IMP-08522] c15 N71-19486

ELECTRON BEAMS

Using electron beam switching for brushless
motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
Electron beam scanning system for improved image
definition and reduced power requirements for
video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
Electron beam deflection devices for measuring
electric fields
[NASA-CASE-IMP-10289] c14 N71-23699
Apparatus to determine electric field strength
by measuring deflection of electron beam
impinging on target
[NASA-CASE-IMP-06617] c09 N71-24843
Characteristics of infrared photodetectors
manufactured from semiconductor material
irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445
Electron beam controller --- using magnetic
field to refocus spent electron beam in
microwave oscillator tube
[NASA-CASE-LEW-11617-1] c09 N74-10195
Image tube --- deriving electron beam replica of
image
[NASA-CASE-GSC-11602-1] c09 N74-21850

ELECTRON BOMBARDMENT

Improved cathode containing barium carbonate
block and heated tungsten screen for electron
bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
Device and method for particle bombardment of
specimens in electron microscope and
measurement of beam intensities
[NASA-CASE-XGS-01725] c14 N69-39982
Electric rocket engine with electron bombardment
ionization chamber
[NASA-CASE-IMP-04124] c28 N71-21822
Electronic cathodes for use in electron
bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
Production of iodine isotope by high energy
bombardment of cesium heat pipe causing
spallation reaction
[NASA-CASE-LEW-11390-2] c24 N73-20763
Single grid accelerator system for electron
bombardment type ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699

ELECTRON DISTRIBUTION

Measurement of plasma temperature and density
using radiation absorption
[NASA-CASE-ARC-10598-1] c25 N74-30156

ELECTRON EMISSION

Vacuum thermionic converter with short-circuited
triodes and increased electron transmission
and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898

ELECTRON FLUX DENSITY

Device and method for particle bombardment of
specimens in electron microscope and
measurement of beam intensities
[NASA-CASE-XGS-01725] c14 N69-39982

ELECTRON IRRADIATION

Electrostatic ion engines using high velocity
electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245

ELECTRON MICROSCOPES

Device and method for particle bombardment of
specimens in electron microscope and
measurement of beam intensities
[NASA-CASE-XGS-01725] c14 N69-39982
Electron microscope and method of making annular
objective aperture
[NASA-CASE-ARC-10448-1] c14 N72-21421
Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c14 N74-12191
Method of forming aperture plate for electron
microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732

ELECTRON PLASMA

Apparatus for producing highly conductive, high
temperature electron plasma with homogenous
temperature and pressure distribution
[NASA-CASE-XLA-00147] c25 N70-34661

ELECTRON TRANSFER

Method for treating metal surfaces to prevent
secondary electron transmission
[NASA-CASE-IMP-09469] c24 N71-25555

ELECTRON TRANSITIONS

Laser utilizing infrared rotation transitions of
diatomic gas for production of different
wavelengths
[NASA-CASE-ARC-10370-1] c16 N72-10432

ELECTRON TUBES

Direct radiation cooling of linear beam
collector tubes
[NASA-CASE-IMP-09227] c15 N69-24319
Refractory filament series circuitry for radiant
heater
[NASA-CASE-XLE-00387] c33 N70-34812

ELECTRON TUNNELING

A doped Josephson tunneling junction for use in
a sensitive IR detector
[NASA-CASE-NPO-13348-1] c14 N74-20022
Method and apparatus for measurement of trap
density and energy distribution in dielectric
films
[NASA-CASE-NPO-13443-1] c35 N75-11307

ELECTRONIC CONTROL

Electronic and mechanical scanning control
system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
Electronic circuit system for controlling
electric motor speed
[NASA-CASE-IMP-01129] c09 N70-38712
Scanning signal phase and amplitude electronic
control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26142
Ion beam deflector system for electronic thrust
vector control for ion propulsion yaw, pitch,
and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
Electronic detection system for peak
acceleration limits in vibrational testing of
spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185
Control and information system for digital
telemetry data using analog converter to
digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226

ELECTRONIC EQUIPMENT

Electronic and mechanical scanning control
system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
Development of pulse-activated polarographic
hydrogen detector
[NASA-CASE-IMP-06531] c14 N71-17575
Development of stable electronic amplifier
adaptable for monolithic and thin film
construction
[NASA-CASE-XGS-02812] c09 N71-19466
Development and characteristics of oscillating
static inverter
[NASA-CASE-XGS-05289] c09 N71-19470
Development of electromagnetic wave transmission
line circulator and application to parametric
amplifier circuits
[NASA-CASE-IMP-02140] c09 N71-23097
Development of optimum pre-detection diversity
combining receiving system adapted for use
with amplitude modulation, phase modulation,
and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098
Electronic cathodes for use in electron
bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
Method and apparatus for adjusting thermal
conductance in electronic components for space
use
[NASA-CASE-IMP-05524] c33 N71-24876
Development and characteristics of solid state
acoustic variable time delay line using direct
current voltage and radio frequency pulses
[NASA-CASE-ERC-10032] c10 N71-25900
Voltage range selection apparatus for sensing
and applying voltages to electronic
instruments without loading signal source
[NASA-CASE-IMP-06497] c14 N71-26244

- Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- Device for rapid adjustment and maintenance of temperature in electronic components
[NASA-CASE-XNP-02792] c14 N71-28958
- Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171
- Readily assembled universal environment housing for electronic equipment
[NASA-CASE-KSC-10031] c15 N72-22486
- Lead attachment for high temperature operation of electronic devices
[NASA-CASE-ERC-10224] c09 N72-25261
- Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NPO-11371] c08 N73-12177
- Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187
- Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XKS-00348] c09 N73-14215
- Thermochromic compositions for detecting heat levels in electronic circuits and devices
[NASA-CASE-NPO-10764-1] c14 N73-14428
- Development of phase control coupling for use with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
- Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-KSC-10108] c14 N73-25461
- Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910
- Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c09 N74-12912
- Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- ELECTRONIC EQUIPMENT TESTS**
- Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XLA-06713] c14 N71-28991
- Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270
- ELECTRONIC FILTERS**
- Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231
- Capacitance multiplier and filter synthesizing network
[NASA-CASE-NPO-11948-1] c10 N74-32712
- ELECTRONIC MODULES**
- Thermal conductive, electrically insulated cleavable adhesive connection between electronic module and heat sink
[NASA-CASE-XMS-02087] c09 N70-41717
- Fabrication methods for matrices of solar cell submodules
[NASA-CASE-XNP-05821] c03 N71-11056
- Development and characteristics of cooling system to maintain temperature of rack mounted electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052
- Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c15 N74-32918
- ELECTRONIC PACKAGING**
- Electrical feedthrough connection for printed circuit boards
[NASA-CASE-XNP-01483] c14 N69-27431
- Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material
[NASA-CASE-LEW-10364-1] c09 N71-13522
- Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934
- Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
- Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-IGS-10010] c03 N72-15986
- Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
- Techniques for packaging and mounting printed circuit boards
[NASA-CASE-MPS-21919-1] c10 N73-25243
- Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MPS-21374-1] c10 N74-12951
- Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c15 N74-32918
- ELECTRONIC RECORDING SYSTEMS**
- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- ELECTRONIC TRANSDUCERS**
- Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XNP-02433] c14 N71-10616
- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2(B)] c09 N74-14941
- ELECTROPHORESIS**
- Electrophoretic sample insertion --- device for uniformly distributing samples in flow path
[NASA-CASE-MPS-21395-1] c14 N74-26948
- Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MPS-21394-1] c12 N74-27744
- ELECTROPHOTOMETERS**
- Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MPS-20044] c14 N71-28993
- ELECTROPHYSIOLOGY**
- Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses
[NASA-CASE-FRC-10029] c09 N71-24618
- ELECTROPLATING**
- Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
- Shielded flat conductor cable fabricated by electroless and electrolytic plating
[NASA-CASE-MPS-13687] c09 N71-28691
- Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
- ELECTROSTATIC CHARGE**
- Charged particle analyzer with periodically varying voltage applied across electrostatic deflection members
[NASA-CASE-XAC-05506-1] c24 N71-16095
- Electrostatic measurement system --- for contact-electrifying a dielectric
[NASA-CASE-MPS-22129-1] c33 N75-18477
- ELECTROSTATIC ENGINES**
- Colloidal particle generator for electrostatic engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
- Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
- Electrostatic ion engines using high velocity electrons to ionize propellant

- [NASA-CASE-XLE-00376] c28 N70-37245
Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661
- ELECTROSTATIC GENERATORS**
Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry
[NASA-CASE-XLE-01400] c07 N70-41331
- ELECTROSTATIC PRECIPITATORS**
Fine particulate capture device
[NASA-CASE-XLE-11583-1] c15 N74-13199
- ELECTROSTATIC PROBES**
Low impedance apparatus for measuring electrostatic field intensity near space vehicles
[NASA-CASE-XLE-00820] c14 N71-16014
- ELECTROSTATIC PROPULSION**
Nuclear electric generator for accelerating charged propellant particles in electrostatic propulsion system
[NASA-CASE-XLE-00818] c22 N70-34248
High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574
Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213
- ELECTROSTATICS**
Electrostatic entrained material measurement system --- comprising vacuum source and tube
[NASA-CASE-MPS-22128-2] c14 N74-18098
Controllable high voltage source having fast settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522
- ELECTROTHERMAL ENGINES**
Electrothermal rocket engine using resistance heated heat exchanger
[NASA-CASE-XLE-00267] c28 N70-33356
High resistance cross flow heat exchangers for electrothermal rocket engines
[NASA-CASE-XLE-01783] c28 N70-34175
- ELEVATION**
Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MPS-14017] c14 N71-26627
Automatic braking device for rapidly transferring humans or materials from elevated location
[NASA-CASE-XKS-07814] c15 N71-27067
- ELEVATORS (LIFTS)**
Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- ELEVONS**
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- ELLIPSES**
Ellipsograph for describing and cutting ellipses with minimal axial dimensions
[NASA-CASE-XLA-03102] c14 N71-21079
- ELONGATION**
Strain gage measurement of elongation due to thermally and mechanically induced stresses
[NASA-CASE-XGS-04478] c14 N71-24233
Method and apparatus for detecting flaws in elongated bodies
[NASA-CASE-MPS-19218-1] c14 N74-34860
- ELUTION**
Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
- EMERGENCIES**
Silent alarm system for multiple room facility or school
[NASA-CASE-NPO-11307-1] c10 N73-30205
- EMERGENCY BREATHING TECHNIQUES**
Pulmonary resuscitation method and apparatus with adjustable pressure regulator
[NASA-CASE-XMS-01115] c05 N70-39922
- EMERGENCY LIFE SUSTAINING SYSTEMS**
Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
- [NASA-CASE-XMS-06162] c31 N71-28851
Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MPS-21042] c07 N72-25171
Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N74-18805
- EMISSION SPECTRA**
Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XMP-02039] c15 N71-15871
Scattering independent determination of absorption and emission coefficients and radiative equilibrium state
[NASA-CASE-NPO-13677-1] c35 N75-16791
- EMITTANCE**
High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
- EMITTERS**
Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112
- EMULSIONS**
Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
[NASA-CASE-MPS-20095] c24 N72-11595
- ENCAPSULATING**
Controlled caging and uncaging mechanism for remote instrument control
[NASA-CASE-GSC-11063-1] c03 N70-35584
Development of bacteriostatic conformal coating and methods of application
[NASA-CASE-GSC-10007] c18 N71-16046
Flexible, repairable, pottable composition for encapsulating electric connectors
[NASA-CASE-XGS-05180] c18 N71-25881
Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
Electrically coupled individually encapsulated solar cell matrix
[NASA-CASE-NPO-11190] c03 N71-34044
- ENCLOSURES**
Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMP-09422] c07 N71-19436
- ENDOSCOPES**
Borescope with adjustable hinged telescoping optical system
[NASA-CASE-MPS-15162] c14 N72-32452
- ENDOTHERMIC REACTIONS**
Sensor device with switches for measuring surface recession of charring and noncharring ablators
[NASA-CASE-XLA-01781] c14 N69-39975
- ENEMY PERSONNEL**
Development of electronic detection system for remotely determining number and movement of enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160
- ENERGY ABSORPTION**
Non-reusable kinetic energy absorber for application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861
Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
Air brake device for absorbing and measuring power from rotating shafts
[NASA-CASE-XLE-00720] c14 N70-40201
Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530
Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMP-10040] c15 N71-22877
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
Energy absorption device in high precision gear train for protection against damage to

- components caused by stop loads
[NASA-CASE-XNP-01848] c15 N71-28959
- Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443
- High energy absorption docking system design for docking large spacecraft
[NASA-CASE-MFS-20863] c31 N73-26876
- Metal shearing energy absorber
[NASA-CASE-RQN-10638-1] c15 N73-30460
- ENERGY CONSERVATION**
Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007
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Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803
- Concentrator device for controlling direction of solar energy onto energy converters
[NASA-CASE-XLE-01716] c09 N70-40234
- Device for converting electromagnetic wave energy into electric power
[NASA-CASE-GSC-11394-1] c09 N73-32109
- Heat operated cryogenic electrical generator --- using liquid helium conversion
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- Electric power generation system directly from laser power
[NASA-CASE-NPO-13308-1] c03 N74-19702
- Schottky barrier laser energy converter
[NASA-CASE-NPO-13390-1] c16 N74-32937
- Low to high temperature energy conversion system --- using ammonia
[NASA-CASE-NPO-13510-1] c44 N75-16972
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[NASA-CASE-XLE-01015] c03 N69-39898
- Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
- Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
- ENERGY DISSIPATION**
Energy dissipating shock absorbing system for land payload recovery or vehicle braking
[NASA-CASE-XLA-00754] c15 N70-34850
- ENERGY SOURCES**
Energy source with tantalum capacitors in parallel and miniature silver oxide button cells for initiating pyrotechnic devices on spacecraft and rocket vehicles
[NASA-CASE-LAR-10367-1] c03 N70-26817
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
- Controllable high voltage source having fast settling time
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- ENERGY STORAGE**
Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713
- Development of stored charge device using field effect transistor technology
[NASA-CASE-NPO-11156-2] c03 N73-30974
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[NASA-CASE-ARC-10456-1] c05 N75-12930
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[NASA-CASE-XLE-00303] c15 N70-36535
- Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-XMF-00148] c28 N70-38710
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- Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
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[NASA-CASE-XNP-02592] c24 N71-20518
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[NASA-CASE-XNP-02592] c24 N71-20518
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[NASA-CASE-ARC-10153] c05 N71-28619
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Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NPO-10141] c11 N71-24964
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[NASA-CASE-XMS-09632-1] c05 N71-11203
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[NASA-CASE-XMF-03212] c15 N71-22721
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- [NASA-CASE-XAC-07043] c05 N71-23161
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- [NASA-CASE-XGS-05533] c04 N69-27487
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- [NASA-CASE-XMF-06589] c05 N71-23159
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- [NASA-CASE-LEW-11072-2] c14 N72-28443
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- [NASA-CASE-MFS-21109-1] c05 N73-27941
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- [NASA-CASE-MFS-21010-1] c05 N73-30078
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- [NASA-CASE-MSC-11561-1] c05 N73-32014
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- [NASA-CASE-MFS-21045-1] c35 N75-15932
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- [NASA-CASE-XNP-03263] c09 N71-18843
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points for error correction
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within single control formulation time interval
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[NASA-CASE-XMS-05304] c05 N71-12336

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[NASA-CASE-XNP-05344] c31 N71-16345

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F

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- Method and apparatus for fabricating solar cell panels
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- Fabrication of root cord restrained fabric suit sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
- Method of fabricating equal length insulated wire
[NASA-CASE-PHC-10038] c15 N72-20444
- Development of thin film temperature sensor from TaO
[NASA-CASE-NPO-11775] c26 N72-28761
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- Fabrication of root cord restrained fabric suit sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
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- Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-IGS-04480] c16 N69-27491
- FACSIMILE COMMUNICATION**
- Restoration and improvement of demodulated facsimile video signals
[NASA-CASE-GSC-10185-1] c07 N72-12081
- Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613
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- Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
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[NASA-CASE-LAR-10007-1] c05 N71-11195
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- Fail-safe multiple transformer circuit configuration
[NASA-CASE-NPO-11078] c09 N72-25262
- Latch mechanism
[NASA-CASE-MSC-12549-1] c15 N74-27903
- FAILURE ANALYSIS**
- Method and apparatus for detecting flaws in elongated bodies
[NASA-CASE-MFS-19218-1] c14 N74-34860
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- Method for reducing mass of ball bearings for long life operation at high speed
[NASA-CASE-LEW-10856-1] c15 N72-22490
- Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c14 N74-18090
- FAIRINGS**
- System for deploying and ejecting releasable clamshell fairing sections from spinning sounding rockets
[NASA-CASE-GSC-10590-1] c31 N73-14853
- FALLING SPHERES**
- Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-IMP-05844] c14 N71-17587
- FAR INFRARED RADIATION**
- Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389
- FAR ULTRAVIOLET RADIATION**
- Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641
- PASTENERS**
- Force measuring instrument for structural members, particularly fastening bolts or studs
[NASA-CASE-XNP-00456] c14 N70-34705
- Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
- Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
- Releasable, pin-type fastener, easily operated during EVA
[NASA-CASE-ARC-10140-1] c15 N71-17653
- Ultrasonic wrench for applying vibratory energy to mechanical fasteners
[NASA-CASE-MFS-20586] c15 N71-17686
- Design and development of electric connectors for rigid and semirigid coaxial cables
[NASA-CASE-XNP-04732] c09 N71-20851
- Design, development, and characteristics of latching mechanism for operation in limited access areas
[NASA-CASE-XMS-03745] c15 N71-21076
- Design and development of module joint clamping device for application to solar array construction
[NASA-CASE-XNP-02341] c15 N71-21531
- Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonmalleable materials in both ends
[NASA-CASE-XPR-05302] c15 N71-23254
- Development of resilient fastener for attaching skin of aerospace vehicles to permit movement of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035
- Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
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- Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
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- Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
- Improving load capacity and fatigue life of rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
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[NASA-CASE-LEW-10856-1] c15 N72-22490
- Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
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- Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XMF-10968] c14 N71-24234
- Fatigue testing apparatus with light shield and infrared reflector for high temperature evaluation of loaded sheet samples
[NASA-CASE-XLA-01782] c14 N71-26136
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[NASA-CASE-XLA-02131] c32 N70-42003
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[NASA-CASE-NPO-11609-1] c06 N72-22114
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[NASA-CASE-XMS-06761] c05 N69-23192
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- Nonconductive tube as feed system for plasma thruster
[NASA-CASE-XLE-02902] c25 N71-21694
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[NASA-CASE-XNP-00650] c27 N71-28929
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[NASA-CASE-LAR-10365-1] c05 N72-27102
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[NASA-CASE-NPO-13091-1] c09 N73-12214
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[NASA-CASE-NPO-11377] c15 N73-27406
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[NASA-CASE-NPO-10760] c09 N72-25254
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[NASA-CASE-NPO-13531-1] c36 N75-13243
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[NASA-CASE-XNP-01107] c10 N71-28859
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[NASA-CASE-NPO-10351] c08 N71-12503
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[NASA-CASE-GSC-10041-1] c10 N71-19418
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[NASA-CASE-XAC-10607] c10 N71-23669
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[NASA-CASE-LAR-10253-1] c09 N72-25258
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[NASA-CASE-NPO-11406] c08 N73-12175
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[NASA-CASE-XAC-04031] c08 N71-18594
- Pulsed magnetic core memory element with
blocking oscillator feedback for interrogation
without loss of digital information
[NASA-CASE-XGS-03303] c08 N71-18595
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with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
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[NASA-CASE-MPS-14610] c09 N71-28886
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[NASA-CASE-GSC-10554-1] c08 N71-29033
- Closed loop servosystem for variable speed tape
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[NASA-CASE-NPO-10700] c07 N71-33613
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control flutter over large range of
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[NASA-CASE-LAR-10682-1] c02 N73-26004
- Regulated dc-to-dc converter for voltage step-up
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[NASA-CASE-HQN-10792-1] c09 N74-11049
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[NASA-CASE-NPO-13544-1] c36 N75-15974
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[NASA-CASE-XLA-01127] c07 N70-41372
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[NASA-CASE-NPO-11282] c10 N73-16205
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[NASA-CASE-ARC-10302-1] c04 N74-15778
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[NASA-CASE-NPO-13481-1] c09 N74-32675
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[NASA-CASE-GSC-10097-1] c08 N71-27210
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[NASA-CASE-MPS-22907-1] c26 N75-10210
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[NASA-CASE-LAR-10994-1] c24 N75-13032
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[NASA-CASE-LAR-11224-1] c15 N74-20072
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[NASA-CASE-NPO-11333] c08 N72-22162
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[NASA-CASE-GSC-10835-1] c09 N72-33205
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[NASA-CASE-NPO-11156-2] c03 N73-30974
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for stabilizing gate threshold potential of
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[NASA-CASE-GSC-11425-1] c24 N74-20329
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[NASA-CASE-LEW-11726-1] c26 N73-26752
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[NASA-CASE-XNP-04389] c28 N71-20942
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[NASA-CASE-MPS-20095] c24 N72-11595
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[NASA-CASE-NPO-13443-1] c35 N75-11307
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[NASA-CASE-MPS-14711] c15 N71-26185
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[NASA-CASE-XLE-03583] c31 N71-17629
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[NASA-CASE-MPS-22952-1] c37 N75-15055
- FIRE PREVENTION**
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[NASA-CASE-MPS-15063] c14 N72-25412
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[NASA-CASE-ARC-10714-1] c18 N74-11366
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[NASA-CASE-GSC-11600-1] c14 N74-21019
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[NASA-CASE-GSC-10072] c18 N71-14014
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[NASA-CASE-ARC-10180-1] c28 N72-20767
Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
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[NASA-CASE-ARC-10304-1] c18 N73-26572
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[NASA-CASE-MSC-14331-1] c18 N73-27501
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[NASA-CASE-ARC-10180-1] c06 N74-12814
- FIRES**
Device for generating and controlling combustion products for testing of fire detection system
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Development and characteristics of strainer for flared tube fitting
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[NASA-CASE-ARC-10322-1] c14 N74-27875
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[NASA-CASE-MPS-24577-1] c03 N74-29410
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[NASA-CASE-LAR-10249-1] c02 N71-26110
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- Modification of one man life raft
[NASA-CASE-LAR-10241-1] c05 N74-14845
- FLOATS**
Magnetically centered liquid column float
[NASA-CASE-XAC-00030] c14 N70-34820
- FLotation**
Development and characteristics of rescue litter with inflatable flotation device for water rescue application

FLOW DEFLECTION

SUBJECT INDEX

[NASA-CASE-XMS-04170] c05 N71-22748

FLOW DEFLECTION

Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c28 N74-28233

FLOW DIRECTION INDICATORS

Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271

Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864

FLOW DISTRIBUTION

Multiple orifice fluid flow control valve to provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867

Photographing surface flow patterns on wind tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366

Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XMP-01779] c12 N71-20815

Dual wavelength scanning Doppler velocimeter --- without perturbation of flow fields
[NASA-CASE-ARC-10637-1] c35 N75-16783

FLOW MEASUREMENT

Collapsible flow test device for obstructed passages
[NASA-CASE-XMS-04917] c14 N69-24257

Simulated fuel assembly-type flow measurement apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669

Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365

Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415

Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c14 N74-18101

FLOW REGULATORS

Antibacklash circuit for hydraulic drive system
[NASA-CASE-XNP-01020] c03 N71-12260

Tubular flow restrictor for gas flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608

Fluid flow control valve for regulating fluids in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15967

Control of gas flow from pressurized vessel by thermal expansion of metal plug
[NASA-CASE-NPO-10298] c12 N71-17661

Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-09704] c12 N71-18615

Describing device for changing flow rate of fluid in duct in response to change in temperature
[NASA-CASE-MFS-14259] c15 N71-19213

Pneumatic servoamplifier for controlling flow regulation
[NASA-CASE-MSC-12121-1] c15 N71-27147

Gas flow control device, including housing and input port
[NASA-CASE-NPO-11479] c15 N73-13462

FLOW STABILITY

Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMP-06926] c28 N71-22983

Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c12 N74-27730

FLOW VELOCITY

Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367

Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330

Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XMP-01813] c28 N70-41582

Positive displacement flowmeter for measuring extremely low flows of fluid with self calibrating features
[NASA-CASE-XMF-02822] c14 N70-41994

Zeta potential flowmeter for measuring very slow to very high flows
[NASA-CASE-XNP-06509] c14 N71-23226

Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074

Doppler shifted laser beam as fluid velocity sensor
[NASA-CASE-XAC-10770-1] c16 N71-24828

Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-FRC-10022] c12 N71-26546

Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432

Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199

Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415

Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c12 N74-27730

Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969

FLOW VISUALIZATION

Method and apparatus for measuring shock layer radiation distribution about high velocity objects
[NASA-CASE-XAC-02970] c14 N69-39896

Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XMP-01779] c12 N71-20815

FLOWMETERS

Collapsible flow test device for obstructed passages
[NASA-CASE-XMS-04917] c14 N69-24257

Simulated fuel assembly-type flow measurement apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669

Positive displacement flowmeter for measuring extremely low flows of fluid with self calibrating features
[NASA-CASE-XMF-02822] c14 N70-41994

Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569

Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212

Zeta potential flowmeter for measuring very slow to very high flows
[NASA-CASE-XNP-06509] c14 N71-23226

Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle
[NASA-CASE-XPR-02007] c12 N71-24692

Doppler shifted laser beam as fluid velocity sensor
[NASA-CASE-XAC-10770-1] c16 N71-24828

Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-FRC-10022] c12 N71-26546

Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365

Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
[NASA-CASE-MSC-13436-1] c05 N73-32015

Low power electromagnetic flowmeter system producing zero output signal for zero flow
[NASA-CASE-ARC-10362-1] c14 N73-32326

Electromagnetic flow rate meter --- for liquid metals
[NASA-CASE-LEW-10981-1] c14 N74-21018

Leak detector
[NASA-CASE-MFS-21761-1] c35 N75-15931

FLUID AMPLIFIERS

Fluid jet amplifier with fluid from jet nozzle deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466

- Multiple vortex amplifier system as fluid valve
[NASA-CASE-XMP-04709] c15 N71-15609
- Shear modulated fluid amplifier of high pressure
hydraulic vortex amplifier type
[NASA-CASE-MPS-10412] c12 N71-17578
- Development of vortex fluid amplifier for
throttling rocket exhaust
[NASA-CASE-LEW-10374-1] c28 N73-13773
- Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c09 N74-11050
- FLUID FILMS**
- Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c15 N74-21061
- Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N75-18576
- FLUID FILTERS**
- Absorbent apparatus for separating gas from
liquid-gas stream used in environmental
control under zero gravity conditions
[NASA-CASE-XMS-01492] c05 N70-41297
- Compact high pressure filter for rocket fuel lines
[NASA-CASE-XNP-00732] c28 N70-41447
- Development of liquid separating system using
capillary device connected to flexible bladder
storage chamber
[NASA-CASE-XMS-13052] c14 N71-20427
- Design and characteristics of system for
regenerating fluid filter to remove trapped
particles with application to space shuttle
systems
[NASA-CASE-MSC-14273-1] c12 N73-28179
- Quick disconnect filter coupling
[NASA-CASE-MPS-22323-1] c15 N74-26988
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c12 N74-29652
- FLUID FLOW**
- Fluid jet amplifier with fluid from jet nozzle
deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466
- Pneumatic system for cyclic control of fluid
flow in pneumatic device
[NASA-CASE-XMS-04843] c03 N69-21469
- Multiple orifice fluid flow control valve to
provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867
- Conical valve plug for use with reactive
cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
- Pressure regulating system with high pressure
fluid source, adapted to maintain constant
downstream pressure
[NASA-CASE-XNP-00450] c15 N70-38603
- Antiflutter check valve for use with high
pressure fluid flow
[NASA-CASE-XNP-01152] c15 N70-41811
- Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
- Multiple vortex amplifier system as fluid valve
[NASA-CASE-XMP-04709] c15 N71-15609
- Heated element sensor for fluid flow detection
in thermal conductive conduit with adaptive
means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569
- Throttle valve for regulating fluid flow volume
[NASA-CASE-XNP-09698] c15 N71-18580
- Photometric flow meter with comparator reference
means
[NASA-CASE-XGS-01331] c14 N71-22996
- Combination pressure transducer-calibrator
assembly for measuring fluid
[NASA-CASE-XNP-01660] c14 N71-23036
- Valve assembly for controlling simultaneously
more than one fluid flow, and having stable
qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191
- Flowmeters for sensing low fluid flow rate and
pressure for application to respiration rate
studies
[NASA-CASE-FRC-10022] c12 N71-26546
- Control valve for switching main stream of fluid
from one stable position to another by means
of electrohydrodynamic forces
[NASA-CASE-NPO-10416] c12 N71-27332
- Fluid control jet amplifiers
[NASA-CASE-XLE-09341] c12 N71-28741
- Mass flow meter containing beta source for
measuring nonpolar liquid flow
[NASA-CASE-MPS-20485] c14 N72-11365
- Flow rate switch for detecting variations in
fluid flow velocity through conduits of
pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199
- Torsional disconnect device for releasably
coupling distal ends of fluid conduits
[NASA-CASE-NPO-10704] c15 N72-20445
- Capacitive tank gaging device for monitoring one
constituent of two phase fluid by sensing
dielectric constant
[NASA-CASE-MPS-21629] c14 N72-22442
- Transferring liquid nitrogen through vacuua
chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484
- Design and development of device to prevent
geysing during convective circulation of
cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486
- Design and development of thermomechanical pump
for transmitting warming fluid through fluid
circuit to control temperature of spacecraft
instrumentation
[NASA-CASE-NPO-11417] c15 N73-24513
- Design and characteristics of system for
regenerating fluid filter to remove trapped
particles with application to space shuttle
systems
[NASA-CASE-MSC-14273-1] c12 N73-28179
- Combined dual scatter, local oscillator laser
Doppler velocimeter
[NASA-CASE-ARC-10642-1] c14 N74-18099
- Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c14 N74-18101
- Flow control valve --- for high temperature fluids
[NASA-CASE-NPO-11951-1] c15 N74-21065
- Apparatus for establishing flow of a fluid mass
having a known velocity
[NASA-CASE-MPS-21424-1] c12 N74-27730
- An externally supported internally stabilized
flexible duct joint
[NASA-CASE-MPS-19194-1] c15 N74-34882
- Internally supported flexible duct joint ---
device for conducting fluids in high pressure
systems
[NASA-CASE-MPS-19193-1] c37 N75-19686
- FLUID INJECTION**
- Solid propellant ignition with hypergolic fluid
injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375
- Method for igniting solid propellant rocket
motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634
- Constructing fluid spike nozzle to eliminate
heat transfer and high temperature problems
inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647
- Method and apparatus for producing fine
particles in cryogenic liquid bath for gelled
rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
- Fluid transferring system design for purging
toxic, corrosive, or noxious fluids and fumes
from materials handling equipment for
cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
- Tertiary flow injection system for thrust
vectoring of propulsive nozzle flow
[NASA-CASE-MPS-20831] c28 N71-29153
- Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c05 N74-22771
- FLUID JETS**
- Directed fluid stream for propeller blade
loading control
[NASA-CASE-XAC-00139] c02 N70-34856
- FLUID LOGIC**
- Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
- FLUID MECHANICS**
- Fluid leakage detection system with automatic
monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
- Development and characteristics of parallel
plate viscometer for determination of absolute
viscosity of liquids and viscoelastic materials
[NASA-CASE-NPO-11387] c14 N73-14429
- FLUID POWER**
- Fluid power transmission and gas bearing system
[NASA-CASE-XMS-01445] c12 N71-16031

Low friction gas bearing system for fluid power transmission to bearing-supported payload
[NASA-CASE-ERC-10097] c15 N71-28465

FLUID ROTOR GYROSCOPES
Piezoelectric pump for supplying fluid at high frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824

FLUID SWITCHING ELEMENTS
Two phase fluid pressurization system for propellant tank
[NASA-CASE-MSC-12390] c27 N71-29155

FLUID TRANSMISSION LINES
Device for suppressing pressure oscillations in fluid transmission lines
[NASA-CASE-MPS-10354] c12 N70-41976
Device for suppressing pressure oscillations in fluid transmission line
[NASA-CASE-MPS-10354-2] c12 N72-25306

FLUIDIC CIRCUITS
Using molds for fabricating individual fluid circuit components
[NASA-CASE-XLA-07829] c15 N72-16329
Flow measuring apparatus
[NASA-CASE-LFW-12078-1] c14 N74-18101

FLUIDICS
Fluidic-thermochromic display device
[NASA-CASE-ERC-10031] c12 N71-18603
Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519
Continuous gas flow control by fluidic proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769
Fluid pressure amplifier and system
[NASA-CASE-LAR-10858-1] c09 N74-11050

FLUIDS
Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
Fluid polydimethylsiloxane resin with low outgassing properties in cured state
[NASA-CASE-GSC-11358-1] c06 N73-26100
Solar energy trap
[NASA-CASE-MPS-22744-1] c44 N75-10586

FLUORESCENCE
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-YGS-01231] c14 N70-41676
Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787
Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c14 N74-25932
Chromato-fluorographic drug detector --- device for detecting and recording fluorescent properties of materials
[NASA-CASE-ARC-10633-1] c14 N74-26947

FLUORIDES
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LFW-10327] c17 N71-33408
Perfluoro polyether acyl fluorides
[NASA-CASE-NPO-10765] c06 N72-20121

FLUORINATION
Fluorinated polyurethanes produced by reacting hydroxy terminated perfluoro polyether with diisocyanate
[NASA-CASE-NPO-10767-2] c06 N72-27151
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MPS-21040-1] c06 N73-30098

FLUORINE
Reaction of polyperfluoropolyenes with fluorine to produce saturated polymer chain or create reactive sites on chain
[NASA-CASE-NPO-10862] c06 N72-22107

FLUORO COMPOUNDS

Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate
[NASA-CASE-NPO-10863] c06 N70-11251

Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252

Oxygen difluoride in synthesis of fluoropolymers
[NASA-CASE-NPO-12061-1] c06 N72-21100

Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol
[NASA-CASE-MPS-10507] c06 N73-30101

Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MPS-11492] c06 N73-30102

Chemical and elastic properties of fluorinated polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076

FLUOROCARBONS
Electrically conductive fluorocarbon polymers
[NASA-CASE-XLE-06774-2] c06 N72-25150

FLUTTER
Antiflutter check valve for use with high pressure fluid flow
[NASA-CASE-XNP-01152] c15 N70-41811
Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004

FLUX (RATE)
Solid state device for mapping flux and power in nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808
Fluxgate magnetometer for measuring magnetic field along two axes using one sensor
[NASA-CASE-GSC-10441-1] c14 N71-27325

FLUX DENSITY
Particle beam power density detection and measurement apparatus
[NASA-CASE-XLE-00243] c14 N70-38602

FLUXES
Hydrazine monoperoxifluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
Metal soldering with hydrazine monoperoxifluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078

FOAMS
Fire retardant polyisocyanurate foam with high temperature resistance
[NASA-CASE-ARC-10280-1] c18 N70-34695
Plastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778
Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929
Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779
Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-MPS-20261] c14 N71-27005
Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XNP-09902] c15 N72-11387
Polyimide foam for the thermal insulation and fire protection

- [NASA-CASE-ARC-10464-1] c06 N74-12812
 Intumescent composition, foamed product prepared
 therewith and process for making same
 [NASA-CASE-ARC-10304-2] c18 N74-27037
- FOCUSING**
 X ray collimating structure for focusing
 radiation directly onto detector
 [NASA-CASE-XHQ-04106] c14 N70-40240
 Apertured electrode focusing system for ion
 sources with nonuniform plasma density
 [NASA-CASE-XNP-03332] c09 N71-10618
 Development and characteristics of Petzval type
 objective including field shaping lens for
 focusing light of specified wavelength band on
 curved photoreceptor
 [NASA-CASE-GSC-10700] c23 N71-30027
 Absolute focus locking device for microscopes to
 maintain set focus for extended time period
 [NASA-CASE-LAR-10184] c14 N72-22445
 Electron beam controller --- using magnetic
 field to refocus spent electron beam in
 microwave oscillator tube
 [NASA-CASE-LEW-11617-1] c09 N74-10195
 Automatic focus control for facsimile cameras
 [NASA-CASE-LAR-11213-1] c35 N75-15014
 Multiplate focusing collimator --- for scanning
 small near radiation sources
 [NASA-CASE-NPS-20932-1] c35 N75-19616
- FOG**
 Anti-fog composition --- for prevention of
 fogging on surfaces such as space helmet
 visors and windshields
 [NASA-CASE-MSC-13530-2] c23 N75-14834
- FOILS (MATERIALS)**
 Foil seal between parts moving relative to each
 other
 [NASA-CASE-XLE-05130] c15 N69-21362
 Procedure for making insulating foil for use in
 multilayer insulating system
 [NASA-CASE-LEW-11484-1] c15 N73-22415
- FOLDING**
 Characteristics of device for folding thin
 flexible sheets into compact configuration
 [NASA-CASE-XLA-00137] c15 N70-33180
- FOLDING STRUCTURES**
 Lenticular vehicle with foldable aerodynamic
 control flaps and reaction jets for operation
 above and within earth's atmosphere
 [NASA-CASE-XGS-00260] c31 N70-37924
 Collapsible, space erectable loop antenna system
 for space vehicle
 [NASA-CASE-XNP-00437] c07 N70-40202
 Unfolding boom assembly with knuckle joints for
 positioning equipment for spacecraft
 [NASA-CASE-XGS-00938] c32 N70-41367
 Foldable conduit capable of springing back as
 self erecting structural member
 [NASA-CASE-XLE-00620] c32 N70-41579
 Foldable, double cone and parabolic reflector
 system for solar ray concentration
 [NASA-CASE-XLA-04622] c03 N70-41580
 Method for deployment of flexible wing glider
 from space vehicle with minimum impact and
 loading
 [NASA-CASE-XMS-00907] c02 N70-41630
 Development and characteristics of variable
 sweep wing control system for supersonic
 aircraft
 [NASA-CASE-XLA-03659] c02 N71-11041
 Hydraulic actuator design for space deployment
 of heat radiators
 [NASA-CASE-MSC-11817-1] c15 N71-26611
 Apparatus and method of assembling building
 blocks by folding pre-cut flat sheets of
 material during on-site construction
 [NASA-CASE-MSC-12233-1] c15 N72-25454
- FOOD**
 Detection of bacteria in biological fluids and
 foods
 [NASA-CASE-GSC-11533-1] c14 N73-13435
- FORCE**
 Electromechanical actuator for producing
 mechanical force and/or motion in response to
 electrical signals
 [NASA-CASE-NPO-11738-1] c09 N73-30185
- FORCE DISTRIBUTION**
 Device for handling heavy loads by distributing
 forces
 [NASA-CASE-XNP-04969] c11 N69-27466
- Development of two force component measuring
 device
 [NASA-CASE-XAC-04886-1] c14 N71-20439
 Tensile strength testing device having pulley
 guides for exerting multiple forces on test
 specimen
 [NASA-CASE-XNP-05634] c15 N71-24834
 Development and characteristics of device for
 indicating and recording magnitude of force
 applied in axial direction
 [NASA-CASE-MSC-15626-1] c14 N72-25411
 Variable direction force coupler for
 transmitting force along selectable curve path
 [NASA-CASE-NPS-20317] c15 N73-13463
- FORMATES**
 Preparation of polyurethane polymer by reacting
 hydroxy polyformal with organic diisocyanate
 [NASA-CASE-NPS-10509] c06 N73-30103
- FORMING TECHNIQUES**
 Apparatus for forming wire grids for electric
 strain gages
 [NASA-CASE-XLB-00023] c15 N70-33330
 Hot forming of plastic sheets
 [NASA-CASE-XMS-05516] c15 N71-17803
 Forming tubes from long thin flat metal strips
 [NASA-CASE-XGS-04175] c15 N71-18579
 Portable magnetomotive hammer for metal working
 [NASA-CASE-XNP-03793] c15 N71-24833
 Forming mold for polishing and machining curved
 solar magnesium reflector with reinforcing ribs
 [NASA-CASE-XLE-08917-2] c15 N71-24836
 Heat treatment and tooling for forming shapes
 from thermosetting honeycomb core sheets
 [NASA-CASE-NPO-11036] c15 N72-24522
 Method of heat treating a formed powder product
 material
 [NASA-CASE-LEW-10805-3] c17 N74-10521
 Drilled ball bearing with a one piece
 anti-tipping cage assembly
 [NASA-CASE-LEW-11925-1] c15 N74-18133
 Apparatus for forming dished ion thruster grids
 [NASA-CASE-LEW-11694-2] c15 N74-22147
 Molding apparatus --- for thermosetting plastic
 compositions
 [NASA-CASE-LAR-10489-2] c15 N74-32920
- FOUNDATIONS**
 Base support for expansible and contractible
 coupling between two members
 [NASA-CASE-NPO-11059] c15 N72-17454
- FOURIER TRANSFORMATION**
 Photographic film restoration system using
 Fourier transformation lenses and spatial filter
 [NASA-CASE-MSC-12448-1] c14 N72-20394
 Continuous Fourier transform method and apparatus
 --- for the analysis of simultaneous analog
 signal components
 [NASA-CASE-ARC-10466-1] c60 N75-13539
- FRACTIONATION**
 Purification apparatus for vaporization and
 fractional distillation of liquids
 [NASA-CASE-XNP-08124] c15 N71-27184
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- An indicator providing continuous indication of
the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c35 N75-11308
- GAS DISCHARGE TUBES**
Direct current powered self repeating plasma
accelerator with interconnected annular and
linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- GAS DISCHARGES**
Radio frequency noise generator having microwave
slow-wave structure in gas discharge plasma
[NASA-CASE-XER-11019] c09 N71-23598
- GAS EVOLUTION**
Development of filter system for control of
outgas contamination in vacuum conditions
using absorbent beds of molecular sieve
zeolite, silica gel, and charcoal
[NASA-CASE-MFS-14711] c15 N71-26185
- GAS EXPANSION**
Sealed electric storage battery with gas
manifold interconnecting each cell
[NASA-CASE-XNP-03378] c03 N71-11051
- Method and apparatus for producing very low
temperature refrigeration based on gas
pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
- Gas-operated actuator with cyclic motion of
expansion chamber
[NASA-CASE-NPO-11340] c15 N72-33477
- GAS FLOW**
Tubular flow restrictor for gas flow control in
pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
- Developing high pressure gas purification and
filtration system for use in test operations
of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588
- Burst diaphragm flow initiator for installation
in short duration wind tunnels
[NASA-CASE-MFS-12915] c11 N71-17600
- Color photointerpretation of interference colors
reflected from thin film oil-coated components
in moving gases for gas flow visualization
[NASA-CASE-XMP-01779] c12 N71-20815
- Transducer for monitoring oxygen flow in
respirator
[NASA-CASE-FRC-10012] c14 N72-17329
- Design, development, and operation of shock tube
with bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245

- Continuous gas flow control by fluidic proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769
- Development of filter apparatus for gas separation and characteristics of filter cell support frame for improved operation
[NASA-CASE-MSC-12297] c14 N72-23457
- Pressurized inert gas feed for lighting system
[NASA-CASE-KSC-10644] c09 N72-27227
- Development of method for controlling vapor content of gas
[NASA-CASE-NPO-10633] c03 N72-28025
- Gas flow control device, including housing and input port
[NASA-CASE-NPO-11479] c15 N73-13462
- Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127
- Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c14 N74-18101
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MPS-21424-1] c12 N74-27730
- Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c28 N74-28233
- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
- GAS GENERATORS**
- Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
- Gas operated quick disconnect coupling for umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450
- Actuator operated by electrolytic drive gas generator and evacuator
[NASA-CASE-NPO-11369] c15 N73-13467
- Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
- GAS GUNS**
- Electric arc device for minimizing electrode ablation and heating gases to supersonic or hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628
- GAS HEATING**
- Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c15 N74-15126
- GAS INJECTION**
- Pressurized gas injection for burning rate control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
- Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127
- GAS IONIZATION**
- Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
- Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-ERC-10044-1] c14 N71-27090
- GAS LASERS**
- Gas laser frequency stabilized by position of mirrors in resonant cavity
[NASA-CASE-XGS-03644] c16 N71-18614
- Laser utilizing infrared rotation transitions of diatomic gas for production of different wavelengths
[NASA-CASE-ARC-10370-1] c16 N72-10432
- Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c16 N74-16187
- Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NPO-13544-1] c36 N75-15974
- GAS LUBRICANTS**
- High temperature gas lubricant consisting of two fluoro-bromo-methanes
[NASA-CASE-XLE-00353] c18 N70-39897
- GAS MASERS**
- Solid state chemical source for ammonia beam masers
[NASA-CASE-XGS-01504] c16 N70-41578
- Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination
[NASA-CASE-HQN-10654-1] c16 N73-13489
- Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NPO-13050-1] c36 N75-15029
- GAS METERS**
- Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c04 N74-32518
- GAS MIXTURES**
- Gas analyzer for bi-gaseous mixtures suitable for use in test facilities
[NASA-CASE-XLA-01431] c14 N71-10774
- Equipment for measuring partial water vapor pressure in gas tank
[NASA-CASE-XMS-01618] c14 N71-20741
- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742
- Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146
- GAS PIPES**
- Tubular flow restrictor for gas flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
- GAS PRESSURE**
- Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
- Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681
- Wide range dynamic pressure sensor with vibrating diaphragm for measuring density and pressure of gaseous environment
[NASA-CASE-ARC-10263-1] c14 N72-22438
- Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c04 N74-32518
- GAS STREAMS**
- Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
- Stagnation pressure probe --- for measuring pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c14 N74-32878
- GAS TEMPERATURE**
- Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
- GAS TURBINE ENGINES**
- Variable-orifice hydraulic mechanism for aircraft gas turbine engine fuel control
[NASA-CASE-LEW-11187-1] c28 N73-19793
- Airflow distribution control in gas turbine engines
[NASA-CASE-LEW-11593-1] c28 N73-25816
- Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665
- GAS TURBINES**
- Method for maintaining good performance in gas turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915
- Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c28 N74-15453
- GAS VALVES**
- High-temperature, high-pressure spherical segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
- Shrink-fit vacuum system gas valve
[NASA-CASE-XGS-00587] c15 N70-35087
- Gas valve operated by thermally expanding and contracting device
[NASA-CASE-XLE-00815] c15 N70-35407
- Three-port transfer valve with one port open continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051
- GAS WELDING**
- Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XMP-02039] c15 N71-15871
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- GAS-LIQUID INTERACTIONS**
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c12 N74-29652
- GASEOUS DIFFUSION**
- Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove

- [NASA-CASE-XLE-02531] c05 N71-23080
Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759
- GASEOUS FISSION REACTORS**
Nuclear gaseous reactor for heating working fluid to high temperatures
[NASA-CASE-XLE-00321] c22 N70-34572
Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759
- GASEOUS ROCKET PROPELLANTS**
Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMF-06926] c28 N71-22983
- GASES**
Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
High speed scanner for measuring mass of preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
Observation window for internal gas confining chamber
[NASA-CASE-NPO-10890] c11 N73-12265
Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- GASKETS**
Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MPS-21364-1] c15 N74-18126
- GATES (CIRCUITS)**
Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123
Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432
Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
- GATES (OPENINGS)**
Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- GEARS**
Precision stepping drive device using cam disk
[NASA-CASE-MPS-14772] c15 N71-17692
Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MPS-14971] c15 N71-24984
Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c15 N74-27901
Zero torque gear head wrench
[NASA-CASE-NPO-13059-1] c37 N75-10456
- GELLED ROCKET PROPELLANTS**
Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
- GELS**
Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
- [NASA-CASE-XNP-00920] c15 N71-15906
- GENERATORS**
Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MPS-21424-1] c12 N74-27730
- GIMBALS**
Gimbaled partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-XMF-01544] c28 N70-34162
Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XMF-01669] c21 N71-23289
Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimbaled package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-HSC-10959] c15 N71-26243
Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
- GLANDS (SEALS)**
Development of mating flat surfaces to inhibit leakage of fluid around shafts
[NASA-CASE-XLE-10326-2] c15 N72-29488
- GLASS**
Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267
Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988
Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLE-08569] c03 N71-23449
Apparatus for applying thin glass slides to solar cells
[NASA-CASE-NPO-10575] c03 N72-25019
Silicon solar cell with plastic film binding to cover glass
[NASA-CASE-LEW-11065-2] c03 N73-26048
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c15 N74-21063
- GLASS COATINGS**
Method of attaching cover glass to silicon solar cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681
Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582
Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037
- GLASS ELECTRODES**
Liquid junction for glass electrode or pH meters
[NASA-CASE-NPO-10682] c15 N70-34699
- GLASS FIBERS**
Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489
Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards
[NASA-CASE-MPS-20408] c18 N73-12604
Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c18 N74-11366
Technique for bonding --- process for molding silicone elastomer into fiberglass honeycomb panel
[NASA-CASE-LAR-10073-1] c32 N74-23449
Method of repairing discontinuity in fiberglass structures
[NASA-CASE-LAR-10416-1] c18 N74-30001
- GLIDE PATHS**
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

GLOBES

Orbital and entry tracking accessory for globes
--- to provide range requirements for reentry
vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015

GLOVES

Gas purged dry box glove reducing permeation of
air or moisture into dry box or isolator by
diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080

GLOW DISCHARGES

Deposition of alloy films --- on irregularly
shaped metal object
[NASA-CASE-LEW-11262-1] c18 N74-13270

GLUCOSE

Use of enzyme hexokinase and glucose to reduce
inherent light levels of ATP in luciferase
compositions
[NASA-CASE-XGS-05533] c04 N69-27487

GOLD COATINGS

Lithium drifted silicon radiation detector with
gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191

GONDOLAS

System for controlling torque buildup in
suspension of gondola connected to balloon by
parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008

GRANULAR MATERIALS

Development of device for separating,
collecting, and viewing soil particles
[NASA-CASE-XMP-09770] c15 N71-20440

GRAPHITE

Silver chloride use in technique for fusion
bonding of graphite to silver, glass,
ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735
Diffusion bonded graphite reinforced aluminum
composites
[NASA-CASE-MPS-21077] c18 N71-34502

GRATINGS (SPECTRA)

Concave grating spectrometer for use in near and
vacuum ultraviolet regions
[NASA-CASE-XGS-01036] c14 N70-40003

GRAVIMETERS

Device for determining acceleration of gravity
by interferometric measurement of travel of
falling body
[NASA-CASE-XMP-05844] c14 N71-17587

GRAVITATION

Design of precision vertical alignment system
using laser with gravitationally sensitive
cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397

GRAVITATIONAL CONSTANT

Gravity device for accurate and rapid indication
of relative gravity conditions aboard
accelerating carrier
[NASA-CASE-XMP-00424] c11 N70-38196

GRAVITATIONAL EFFECTS

Gravity environment simulation by locomotion and
restraint aid for studying manual operation
performance of astronauts at zero gravity
[NASA-CASE-ARC-10153] c05 N71-28619
Anti-gravity device
[NASA-CASE-MPS-22758-1] c15 N74-22146

GRAVITATIONAL FIELDS

Difference indicating circuit used in
conjunction with device measuring
gravitational fields
[NASA-CASE-XMP-08274] c10 N71-13537

GRAVITY GRADIENT SATELLITES

Stabilization system for gravity-oriented
satellites using single damper rod
[NASA-CASE-XAC-01591] c31 N71-17729
Method of stationkeeping for lenticular gravity
gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969

GRAVITY GRADIOMETERS

Gravity device for accurate and rapid indication
of relative gravity conditions aboard
accelerating carrier
[NASA-CASE-XMP-00424] c11 N70-38196
Gravity gradient attitude control system with
gravity gradiometer and reaction wheels for
artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324

GRIDS

Process for fabricating matched pairs of dished

screen and accelerator grids for ion thruster
accelerator system
[NASA-CASE-LEW-11694-1] c28 N73-22721
Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c15 N74-22147
Method of making dished ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310

GRINDING (MATERIAL REMOVAL)

Laser device for removing material from rotating
object for dynamic balancing
[NASA-CASE-MPS-11279] c16 N71-20400
Grinding mixtures of powdered metals and inert
fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448

GRINDING MACHINES

Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c15 N74-27905

GROOVES

Nonreusable energy absorbing device comprising
ring member with plurality of recesses,
cutting members, and guide member mounted in
each recess
[NASA-CASE-XMP-10040] c15 N71-22877
Spiral groove seal --- for hydraulic rotating
shaft
[NASA-CASE-LEW-10326-3] c15 N74-10474
Spiral groove seal --- for rotating shaft
[NASA-CASE-XLE-10326-4] c15 N74-15125

GROUND EFFECT MACHINES

Hovering type flying vehicle design and
principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Platform with several ground effect pads and
plenum chambers
[NASA-CASE-MPS-14685] c31 N71-15689
Tubular guideway for high speed ground effect
machines
[NASA-CASE-LAR-10256-1] c11 N72-20253
Design and development of active control system
for air cushion vehicle to reduce or eliminate
effects of excessive vertical vibratory
acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023
Open tube guideway for high speed air cushioned
vehicles
[NASA-CASE-LAR-10256-1] c11 N74-34672

GROUND HANDLING

Supporting and protecting frame structure and
plug for empty thrust chamber assembly,
handling, and shipping
[NASA-CASE-XMP-00580] c11 N70-35383

GROUND STATIONS

Traffic control system for supersonic transports
using synchronous satellite for data relay
between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
Spacecraft transponder and ground station radar
system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118

GROUND SUPPORT EQUIPMENT

Equipment for testing of ground station ranging
equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
Controlled release device for use in launching
rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043

GROUND-AIR-GROUND COMMUNICATIONS

Fabry-Perot interferometer retrodirective
reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491
Closed loop radio communication ranging system
to determine distance between moving airborne
vehicle and fixed ground station
[NASA-CASE-XMP-01501] c21 N70-41930
Location identification system with ground based
transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173

GUIDANCE (MOTION)

Hovering type flying vehicle design and
principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Development of adjustable attitude guide block
for setting pins perpendicular to irregular
convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
Longitudinal film gate and lock mechanism for
securing film in motion picture cameras under
vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935

- Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
- Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- GUIDANCE SENSORS**
- Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158
- Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
- Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673
- Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
- Translatory shock absorbers for attitude sensors
[NASA-CASE-MFS-22905-1] c35 N75-10407
- GUN LAUNCHERS**
- Self-obturator gas-operated launcher for launching projectiles in decontaminated medium
[NASA-CASE-NPO-11013] c11 N72-22247
- GUNN EFFECT**
- Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XER-07894] c09 N71-18721
- Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
- Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679
- Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235
- GYRATORS**
- Design of gyrator circuit using operational amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517
- Gyrator circuit using MOS field effect transistors
[NASA-CASE-MFS-21433] c09 N73-20232
- Integrated circuit power gyrator with Z-matrix design using parallel transistors
[NASA-CASE-MFS-22342-1] c09 N73-24236
- Integrated P-channel MOS gyrator
[NASA-CASE-MFS-22343-1] c09 N74-34638
- GYROSCOPES**
- Externally pressurized air bearing for gyros operating in high temperature, low gravity environments
[NASA-CASE-XMP-00515] c15 N70-34664
- Air bearings for spacecraft gyros
[NASA-CASE-XMP-00339] c15 N70-39896
- Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132
- Strapped down gyroscope aligned with sun and star tracker optical axis calibrating roll, yaw and pitch values
[NASA-CASE-ARC-10716-1] c31 N73-32784
- Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NPO-13044-1] c14 N74-15094
- GYROSTABILIZERS**
- Passive dual spin misalignment compensators --- gyro stabilized device
[NASA-CASE-GSC-11479-1] c21 N74-28097
- H**
- HAFNIUM**
- Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
- HALIDES**
- Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448
- HALL EFFECT**
- Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904
- Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255
- Development and characteristics of magnetometer with single Bi2Se3 crystal as sensing element
[NASA-CASE-LEW-11632-1] c14 N72-25440
- Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MFS-20207-1] c09 N73-32107
- Hall effect magnetometer
[NASA-CASE-LEW-11632-3] c14 N74-33944
- Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213
- HALL GENERATORS**
- Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037
- HALOGENS**
- Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control
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- High-temperature, high-pressure spherical segment valve [NASA-CASE-XAC-00074] c15 N70-34817
- Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres [NASA-CASE-XLE-00335] c14 N70-35368
- Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere [NASA-CASE-XLE-01300] c15 N70-41993
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- Device for high vacuum film deposition with electromagnetic ion steering [NASA-CASE-NPO-10331] c09 N71-26701
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- Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator [NASA-CASE-XLE-03778] c09 N69-21542
- High voltage cable for use in high intensity ionizing radiation fields [NASA-CASE-XNP-00738] c09 N70-38201
- High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres [NASA-CASE-MSC-12178-1] c09 N71-13518
- High voltage transistor circuit [NASA-CASE-XNP-06937] c09 N71-19516
- High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits [NASA-CASE-XLE-02008] c09 N71-21583
- High voltage distributor [NASA-CASE-GSC-11849-1] c09 N74-22873
- High voltage, high current Schottky barrier solar cell [NASA-CASE-NPO-13482-1] c03 N74-30448
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- System for storing histogram data in optimum number of elements [NASA-CASE-XNP-09785] c08 N69-21928
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- Water cooled contactors for holding rotating carbon arc anode

- [NASA-CASE-XMS-03700] c15 N69-24266
Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
- [NASA-CASE-MFS-11132] c15 N71-17649
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- [NASA-CASE-XNP-03637] c15 N71-21311
Design and construction of mechanical probe for determining if object is properly secured
- [NASA-CASE-MFS-20760] c14 N72-33377
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- [NASA-CASE-MFS-22957-1] c37 N75-14132
- HOLE DISTRIBUTION (MECHANICS)**
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- [NASA-CASE-MFS-22649-1] c15 N73-32376
- HOLE MOBILITY**
Hole mobility of deposited semiconductor films in vacuum utilizing thermal gradient
- [NASA-CASE-XKS-04614] c15 N69-21460
- HOLOGRAPHY**
Development of focused image holography with extended sources
- [NASA-CASE-ERC-10019] c16 N71-15551
Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
- [NASA-CASE-MFS-20074] c16 N71-15565
Recording and reconstructing focused image holograms
- [NASA-CASE-ERC-10017] c16 N71-15567
Method and means for recording and reconstructing holograms without use of reference beam
- [NASA-CASE-ERC-10020] c16 N71-26154
Multiple image storing system for obtaining holographic record on film of high speed projectile
- [NASA-CASE-MFS-20596] c14 N72-17324
Thin film analyzer utilizing holographic techniques
- [NASA-CASE-MFS-20823-1] c16 N73-30476
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- [NASA-CASE-MFS-21704-1] c16 N73-30478
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- [NASA-CASE-MFS-21455-1] c16 N74-15146
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- [NASA-CASE-MFS-21087-1] c14 N74-17153
Holography utilizing surface plasmon resonances
- [NASA-CASE-MFS-22040-1] c14 N74-26946
Real time, large volume, moving scene holographic camera system
- [NASA-CASE-MFS-22537-1] c14 N74-28932
An optical process for producing classification maps from multispectral data
- [NASA-CASE-MSC-14472-1] c13 N74-32780
A holographic motion picture camera
- [NASA-CASE-MFS-22517-1] c14 N74-33943
- HOMING DEVICES**
Location identification system with ground based transmitter and aircraft borne receiver/decoder
- [NASA-CASE-ERC-10324] c07 N72-25173
- HONEYCOMB CORES**
Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
- [NASA-CASE-XLA-03492] c15 N71-22713
Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
- [NASA-CASE-NPO-11036] c15 N72-24522
Honeycomb core structures of minimum surface tubule sections
- [NASA-CASE-ERC-10363] c18 N72-25541
- HONEYCOMB STRUCTURES**
Filling honeycomb matrix with deaerated paste filler
- [NASA-CASE-XMS-01108] c15 N69-24322
Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
- [NASA-CASE-XLA-00204] c32 N70-36536
Fluid flow control valve for regulating fluids in molecular quantities
- [NASA-CASE-XLE-00703] c15 N71-15967
- Method and apparatus for fabrication of heat insulating and ablative reentry structure
- [NASA-CASE-XMS-02009] c33 N71-20834
Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
- [NASA-CASE-XNP-01402] c18 N71-21651
Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
- [NASA-CASE-XNP-05046] c33 N71-28892
Honeycomb panels of minimal surface, periodic tubule layers
- [NASA-CASE-ERC-10364] c18 N72-25540
Development of process for bonding resinous body in cavities of honeycomb structures
- [NASA-CASE-MSC-12357] c15 N73-12489
Technique for bonding --- process for molding silicone elastomer into fiberglass honeycomb panel
- [NASA-CASE-LAR-10073-1] c32 N74-23449
Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
- [NASA-CASE-MFS-21485-1] c15 N74-25968
- HOPPERS**
Design and development of device to prevent clogging in hoppers containing particulate materials
- [NASA-CASE-LAR-10961-1] c15 N73-12496
- HORIZON SCANNERS**
Oscillatory electromagnetic mirror drive system for horizon scanners
- [NASA-CASE-XLA-03724] c14 N69-27461
Multi-lobar scan horizon sensor
- [NASA-CASE-XGS-00809] c21 N70-35427
Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
- [NASA-CASE-XLA-00281] c21 N70-36943
Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
- [NASA-CASE-XGS-01784] c10 N71-20782
Horizon sensor design with digital sampling of spaced radiation-compensated thermopile infrared detectors
- [NASA-CASE-XNP-06957] c14 N71-21088
Method and equipment for locating earth infrared horizon from space, independent of season and latitude
- [NASA-CASE-LAR-10726-1] c14 N73-20475
- HORIZONTAL SPACECRAFT LANDING**
Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
- [NASA-CASE-XLA-00241] c31 N70-37986
- HORIZONTAL TAIL SURFACES**
Development and characteristics of translating horizontal tail assembly for supersonic aircraft
- [NASA-CASE-XLA-08801-1] c02 N71-11043
- HORN ANTENNAS**
Device for improving efficiency of parabolic horn antenna system for linearly polarized signals
- [NASA-CASE-XNP-00611] c09 N70-35219
Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves
- [NASA-CASE-XNP-00540] c09 N70-35382
Characteristics of antenna horn feeds consisting of central horn with overlapping peripheral horns
- [NASA-CASE-GSC-10452] c07 N71-12396
Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
- [NASA-CASE-XNP-01057] c07 N71-15907
Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
- [NASA-CASE-NPO-11264] c07 N72-25174
Horn antenna having V-shaped corrugated slots
- [NASA-CASE-LAR-11112-1] c09 N74-29575
Highly efficient antenna system using a corrugated horn and scanning hyperboloid reflector
- [NASA-CASE-NPO-13568-1] c33 N75-14964
- HOT CATHODES**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
- [NASA-CASE-XLE-07087] c06 N69-39889

HOT PRESSING

Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729

HOT WORKING

Hot forming of plastic sheets
[NASA-CASE-XMS-05516] c15 N71-17803

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Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLR-00454] c23 N71-17802

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Sealed housing for protecting electronic equipment against electromagnetic interference
[NASA-CASE-MSC-12168-1] c09 N71-18600
Open type urine receptacle with tubular housing
[NASA-CASE-MSC-12324-1] c05 N72-22093
Readily assembled universal environment housing for electronic equipment
[NASA-CASE-KSC-10031] c15 N72-22486
Gas flow control device, including housing and input port
[NASA-CASE-NPO-11479] c15 N73-13462
Cryogenic gyroscope housing --- with annular disks for gas spin-up
[NASA-CASE-MFS-21136-1] c23 N74-18323
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[NASA-CASE-NPO-11120-1] c33 N74-18552

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Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039

HUGENIOT EQUATION OF STATE

Determining particle density using known material Hugoniot curves
[NASA-CASE-LAR-11059-1] c76 N75-12810

HULLS (STRUCTURES)

Efficient operation of improved hydrofoil design
[NASA-CASE-XLA-00229] c12 N70-33305

HUMAN BEINGS

Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738
Automatic braking device for rapidly transferring humans or materials from elevated location
[NASA-CASE-IKS-07814] c15 N71-27067

HUMAN BODY

Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-XMS-03371] c05 N70-42000
Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity
[NASA-CASE-IPR-10856] c05 N71-11189
Thermoregulating with cooling flow pipe network for humans
[NASA-CASE-XMS-10269] c05 N71-24147
Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] c05 N73-30078

HUMAN FACTORS ENGINEERING

Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
Harness assembly adapted to support man on ground based apparatus which simulates weightlessness
[NASA-CASE-MFS-14671] c05 N71-12341
Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
Remote control device operated by movement of finger tips for manual control of spacecraft attitude
[NASA-CASE-XAC-02405] c09 N71-16089
Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
[NASA-CASE-MSC-12243-1] c05 N71-24728
Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness

[NASA-CASE-MSC-13282-1] c05 N71-24729
Recording apparatus
[NASA-CASE-LAR-11353-1] c14 N74-20020

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Optical vision testing unit for testing eyes and visual system of human subject
[NASA-CASE-MSC-13601-1] c05 N72-11088
Color perception tester for testing color code perceptiveness of individuals
[NASA-CASE-KSC-10278] c05 N72-16015

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[NASA-CASE-MFS-22102-1] c05 N74-20725
Automatic biowaste sampling
[NASA-CASE-MSC-14640-1] c54 N75-13536

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[NASA-CASE-MSC-13932-1] c08 N74-14920

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Liner for hybrid solid propellants to bind propellant to rocket motor case
[NASA-CASE-XNP-09744] c27 N71-16392

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Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type
[NASA-CASE-MFS-10412] c12 N71-17578
Throttle valve for regulating fluid flow volume
[NASA-CASE-XNP-09698] c15 N71-18580
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[NASA-CASE-ERC-10031] c12 N71-18603
Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-MFS-20830] c15 N71-30028

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[NASA-CASE-XNP-01772] c11 N70-41677
Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-XMP-03248] c11 N71-10604
Hydraulic drive mechanism for leveling isolation platforms
[NASA-CASE-XMS-03252] c15 N71-10658
Antibacklash circuit for hydraulic drive system
[NASA-CASE-XNP-01020] c03 N71-12260
Hydraulic clamping of sheet stock specimens
[NASA-CASE-XLA-05100] c15 N71-17696
Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530
Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975
System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop
[NASA-CASE-ARC-10431-1] c15 N71-27754
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[NASA-CASE-XAC-00048] c02 N71-29128
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[NASA-CASE-NPO-11118] c03 N72-25021
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[NASA-CASE-NPO-13201-1] c37 N75-15050
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[NASA-CASE-LAR-11522-1] c15 N74-34881
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[NASA-CASE-XNP-03459-2] c18 N71-15688
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[NASA-CASE-NPO-11433] c18 N71-31140
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[NASA-CASE-NPO-12122-1] c27 N74-20397
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[NASA-CASE-XLE-00010] c15 N70-33382
- HYDROCARBONS**
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- HYDRODYNAMICS**
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[NASA-CASE-XLE-05641-1] c15 N71-26346
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[NASA-CASE-NPO-12122-1] c27 N74-20397
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[NASA-CASE-XLE-04526] c03 N71-11052
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[NASA-CASE-XLE-06969] c17 N71-24142
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[NASA-CASE-XLE-00207] c28 N70-33375
Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992
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[NASA-CASE-XMP-02263] c02 N74-10907
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[NASA-CASE-XLE-05378] c11 N71-21475
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Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
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[NASA-CASE-XLA-00805] c31 N70-38010
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[NASA-CASE-XLA-03691] c31 N71-15674
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
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[NASA-CASE-LAR-10706-1] c18 N75-16613

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Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015

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Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
[NASA-CASE-IGS-06628] c24 N71-16213
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578
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[NASA-CASE-MSC-13789-1] c11 N73-32152

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Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
[NASA-CASE-NPO-12127-1] c14 N74-13130

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Impact measuring technique for determining size of hypervelocity projectiles
[NASA-CASE-LAR-10913] c14 N72-16282
Multiple image storing system for obtaining holographic record on film of high speed projectile
[NASA-CASE-MFS-20596] c14 N72-17324

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[NASA-CASE-XLA-00378] c11 N71-15925
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[NASA-CASE-XLA-05378] c11 N71-21475

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[NASA-CASE-XNP-09452] c15 N69-27504

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Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
[NASA-CASE-NPO-11559] c28 N73-24784
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[NASA-CASE-MFS-21675-1] c33 N74-33378

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Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184

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High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518

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Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375
Ignition system for monopropellant combustion devices
[NASA-CASE-XNP-00249] c28 N70-38249
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[NASA-CASE-XLE-00323] c28 N70-38505
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[NASA-CASE-XNP-00876] c28 N70-41311

IGNITION TEMPERATURE

Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions
[NASA-CASE-KSC-10198] c11 N71-28629

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Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XMF-03844-1] c14 N71-26474
Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source

[NASA-CASE-HQN-10781] c23 N71-30292

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Video signal enhancement of signal component representing brightness of scene element in low contrast

[NASA-CASE-NPO-10343] c07 N71-27341

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Real time liquid crystal image converter
[NASA-CASE-LAR-11206-1] c23 N74-30118
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[NASA-CASE-HQN-10876-1] c35 N75-19621
Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652

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Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131
Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014

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Apparatus for calibrating an image dissector tube
[NASA-CASE-MFS-22208-1] c14 N74-18100

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Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539

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Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
[NASA-CASE-XLA-00062] c14 N70-33254

IMAGE TUBES

Image tube --- deriving electron beam replica of image
[NASA-CASE-GSC-11602-1] c09 N74-21850

IMAGES

Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XMF-03844-1] c14 N71-26474
Family of physical correction filters for improving optical quality of image
[NASA-CASE-HQN-10542-1] c23 N72-21663
Stereoscopic television system, including projecting pair of binocular images
[NASA-CASE-ARC-10160-1] c23 N72-27728

IMAGING TECHNIQUES

Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Phototransistor imaging system with mosaic of phototransistors on semiconductor substrate
[NASA-CASE-MFS-20809] c23 N73-13660
Computerized optical system for producing multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661
Device for displaying and recording angled views of samples to be viewed by microscope
[NASA-CASE-GSC-11690-1] c14 N73-28499
Ritchey-Chretien telescope responsive to images located off telescope optical axis
[NASA-CASE-GSC-11487-1] c14 N73-30393
Data storage, image tube type
[NASA-CASE-MSC-14053-1] c08 N74-12888
Optical instruments
[NASA-CASE-MSC-14096-1] c14 N74-15095
Field sequential stereo television
[NASA-CASE-MSC-12616-1] c07 N74-32601

IMIDES

Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
Molding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c15 N74-13177

IMINES

Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XMF-08651] c06 N71-11236
Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XMF-08655] c06 N71-11239
Synthesis of schiff bases for heat shields-by acetal amine reactions
[NASA-CASE-XMF-08652] c06 N71-11243

- Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XMP-03074] c06 N71-24740
- IMMOBILIZATION**
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMP-06589] c05 N71-23159
Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
- IMPACT**
Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c14 N74-32886
- IMPACT ACCELERATION**
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and unbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- IMPACT DAMAGE**
Measuring micrometeoroid depth of penetration into various materials
[NASA-CASE-XLA-00941] c14 N71-23240
- IMPACT LOADS**
Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
- IMPACT RESISTANCE**
Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032
- IMPACT STRENGTH**
High impact pressure regulator having minimum number of lightweight movable elements
[NASA-CASE-NPO-10175] c14 N71-18625
- IMPACT TESTING MACHINES**
Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
- IMPACT TOLERANCES**
High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
- IMPEDANCE MATCHING**
Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334
Reflectometer for receiver input impedance match measurement
[NASA-CASE-XNP-10843] c07 N71-11267
Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
Pattern and impedance matching improvements in transversely polarized triaxial antenna
[NASA-CASE-XGS-02290] c07 N71-28809
- IMPEDANCE MEASUREMENTS**
Development of electrical system for measuring high impedance
[NASA-CASE-XMS-08589-1] c09 N71-20569
- IMPLANTATION**
Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
- IMPLOSIONS**
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578
- IMPURITIES**
Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XMP-01016] c26 N71-17818
- INCIDENT RADIATION**
Scattering independent determination of absorption and emission coefficients and radiative equilibrium state
[NASA-CASE-NPO-13677-1] c35 N75-16791
Frequency scanning particle size spectrometer
[NASA-CASE-NPO-13606-1] c35 N75-19627
- INCLINATION**
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c02 N74-34475
- INCOHERENT SCATTERING**
Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c09 N74-20859
- INDICATING INSTRUMENTS**
Controlled caging and uncaging mechanism for remote instrument control
[NASA-CASE-GSC-11063-1] c03 N70-35584
Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
Apparatus for determining quality of bond between high density material and low density material
[NASA-CASE-MFS-13686] c15 N71-18132
Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-MFS-13130] c10 N72-17173
- INDUCTANCE**
Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154
Inductance device with vacuum insulation and materials of low gas entrapping capability
[NASA-CASE-LEW-10330-1] c09 N72-27226
- INDUCTION HEATING**
Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
- INDUCTION MOTORS**
Voltage controlled oscillator circuit for two-phase induction motor control
[NASA-CASE-MFS-21465-1] c10 N73-32145
Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MFS-22088-1] c33 N75-15874
- INDUCTORS**
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XMP-01667] c15 N71-17647
Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364
- INDUSTRIAL PLANTS**
Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457
- INERTIA**
Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
- INERTIAL GUIDANCE**
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
- INERTIAL PLATFORMS**
Inertial component clamping assembly design for spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XMP-01669] c21 N71-23289
Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NPO-13044-1] c14 N74-15094
An attitude control system
[NASA-CASE-MFS-22787-1] c21 N74-35096
- INERTIAL REFERENCE SYSTEMS**
Development of attitude control system for spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159

- Large amplitude, linear inertial reference system of vibrating string type for spacecraft reference plane
[NASA-CASE-XAC-03107] c23 N71-16098
- INFLATABLE SPACECRAFT**
- Passive thermal control coating on aluminum foil laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617
- Erectable, inflatable, radio signal reflecting passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
- Rotating, multisided mandrel for fabricating gored inflatable spacecraft
[NASA-CASE-XLA-04143] c15 N71-17687
- Forming inflatable panels erectable in space for passive communication satellite
[NASA-CASE-XLA-03497] c15 N71-23052
- Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
- INFLATABLE STRUCTURES**
- Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981
- Design of inflatable life raft for aircrafts and boats
[NASA-CASE-XMS-00863] c05 N70-34857
- Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
- Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536
- Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
- Temperature sensor warning system for pneumatic tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620
- Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081
- Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679
- Development and characteristics of self supporting space vehicle
[NASA-CASE-XLA-00117] c31 N71-17680
- Conforming polisher for aspheric surfaces of revolution with inflatable tube
[NASA-CASE-XGS-02884] c15 N71-22705
- Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
- Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MPS-20068] c07 N71-27191
- Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
- Inflatable rocket engine nozzle skirt with transpiration cooling
[NASA-CASE-MPS-20619] c28 N72-11708
- Modification of one man life raft
[NASA-CASE-LAR-10241-1] c05 N74-14845
- INFORMATION RETRIEVAL**
- Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131
- INFRARED DETECTORS**
- Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-XNP-09750] c14 N69-39937
- Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-XNP-03934] c09 N71-22985
- Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445
- A doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c14 N74-20022
- INFRARED INSTRUMENTS**
- Infrared scanning system for maintaining spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181
- INFRARED LASERS**
- Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c14 N74-11284
- INFRARED RADIATION**
- High speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147
- High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c14 N74-18088
- INFRARED SCANNERS**
- Infrared scanning system for maintaining spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181
- Method and equipment for locating earth infrared horizon from space, independent of season and latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
- INFRARED SPECTRA**
- Laser utilizing infrared rotation transitions of diatomic gas for production of different wavelengths
[NASA-CASE-ARC-10370-1] c16 N72-10432
- INFRARED SPECTROMETERS**
- Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
- INFRARED SPECTROSCOPY**
- Polymer coatings for moisture protection of optical windows in infrared spectroscopy
[NASA-CASE-ARC-10749-1] c23 N73-32542
- INFRASONIC FREQUENCIES**
- Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
[NASA-CASE-MSC-11847-1] c14 N72-11363
- INGESTION (BIOLOGY)**
- Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ARC-10583-1] c05 N73-14093
- INITIATORS (EXPLOSIVES)**
- Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
- Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge
[NASA-CASE-LAR-10372] c09 N71-18599
- INJECTION**
- Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-MPS-20261] c14 N71-27005
- INJECTORS**
- Propellant injectors for rocket combustion chambers
[NASA-CASE-XLE-00103] c28 N70-33241
- Fuel injection system for maximum combustion efficiency of rocket engines
[NASA-CASE-XLE-00111] c28 N70-38199
- Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-XMP-00148] c28 N70-38710
- Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
[NASA-CASE-XGS-06628] c24 N71-16213
- Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654
- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- Bipropellant injector with pair of concave deflector plates
[NASA-CASE-XNP-09461] c28 N72-23809
- Coaxial injector for mixing liquid propellants within combustion chambers
[NASA-CASE-NPO-11095] c15 N72-25455
- Improved injector with porous plug for bubbles of gas into feed lines of electrically conductive liquid

[NASA-CASE-NPO-11377] c15 N73-27406

INLET FLOW

High pressure four-way valve with O ring adapted to pass across inlet port
[NASA-CASE-XNP-00214] c15 N70-36908

Method for maintaining good performance in gas turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915

Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646

Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
[NASA-CASE-LEW-11915-1] c12 N74-25805

Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c28 N74-31270

INLET PRESSURE

Fluid jet amplifier with fluid from jet nozzle deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466

Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
[NASA-CASE-LEW-11915-1] c12 N74-25805

INOCULATION

Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor
[NASA-CASE-LAR-11074-1] c51 N75-13502

INORGANIC COATINGS

Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents
[NASA-CASE-GSC-11214-1] c06 N73-13128

INORGANIC COMPOUNDS

Inorganic ion exchange membrane electrolytes for fuel cell use
[NASA-CASE-XNP-04264] c03 N69-21337

Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments
[NASA-CASE-XMF-03988] c15 N71-21403

Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control
[NASA-CASE-ARC-10098-1] c06 N71-24739

Inorganic thermal control and solar reflector coatings
[NASA-CASE-MPS-20011] c18 N72-22566

INPUT

Apparatus for filtering input signals
[NASA-CASE-NPO-10198] c09 N71-24806

RC networks with voltage amplifier, RC input circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172

INSERTION LOSS

High impedance alternating current sensing transformer device between two bolometers for measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057

INSTRUMENT ERRORS

Solar radiation direction detector and device for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239

INSTRUMENT FLIGHT RULES

Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-XPR-04147] c11 N71-10748

INSTRUMENT ORIENTATION

Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736

Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XMF-01669] c21 N71-23289

Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673

Development of solar energy powered heliotrope assembly to orient solar array toward sun
[NASA-CASE-GSC-10945-1] c21 N72-31637

INSTRUMENT PACKAGES

Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XMF-04132] c15 N69-27502

Removable potting compound for instrument shock protection
[NASA-CASE-XLA-00482] c15 N70-36409

Plastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778

High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692

Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461

INSTRUMENTS

Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMF-09422] c07 N71-19436

Design and development of pressure sensor for measuring differential pressures of few pounds per square inch
[NASA-CASE-XMF-01974] c14 N71-22752

Development of temperature compensated thrust measuring gage for measuring forces as function of time in environment with varying temperature
[NASA-CASE-XGS-02319] c14 N71-22965

Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999

Design, development, and characteristics of pressure and temperature sensor operating immersed in fluid flow
[NASA-CASE-LEW-10281-1] c14 N72-17327

Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842

INSULATED STRUCTURES

Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935

INSULATION

Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193

Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication
[NASA-CASE-XGS-02435] c18 N71-22998

Method of fabricating equal length insulated wire
[NASA-CASE-PRC-10038] c15 N72-20444

Inductance device with vacuum insulation and materials of low gas entrapping capability
[NASA-CASE-LEW-10330-1] c09 N72-27226

Insulated electrode for electrocardiographic recording without paste electrolyte
[NASA-CASE-MSC-14339-1] c05 N73-21151

Silica reusable surface insulation
[NASA-CASE-ARC-10721-1] c18 N74-14230

Ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c18 N74-30004

Ceramic coating for silica insulation
[NASA-CASE-MSC-14270-1] c18 N74-30005

INSULATORS

High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574

INTAKE SYSTEMS

Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788

Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
[NASA-CASE-LEW-11915-1] c12 N74-25805

INTEGRATED CIRCUITS

Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic

- circuits
[NASA-CASE-XNP-01753] c08 N71-22897
- Development and characteristics of electric circuitry for detecting electrical pulses rise time and amplitude
[NASA-CASE-XMP-08804] c09 N71-24717
- Method and apparatus for testing integrated circuit microtab welds
[NASA-CASE-ARC-10176-1] c15 N72-21464
- Single integrated circuit chip with field effect transistor
[NASA-CASE-GSC-10835-1] c09 N72-33205
- Integrated circuit power gyrator with Z-matrix design using parallel transistors
[NASA-CASE-MPS-22342-1] c09 N73-24236
- Integrated circuit tangent function generator
[NASA-CASE-MSC-13907-1] c10 N73-26230
- Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112
- Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MPS-21374-1] c10 N74-12951
- Integrated P-channel MOS gyrator
[NASA-CASE-MPS-22343-1] c09 N74-34638
- Four phase logic systems --- including integrated microcircuits
[NASA-CASE-MSC-14240-1] c33 N75-14957
- INTEGRATORS**
- Solid state operational integrator
[NASA-CASE-NPO-10230] c09 N71-12520
- Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
- Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315
- Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-XAC-10607] c10 N71-23669
- High speed phase detector design indicating phase relationship between two square wave input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596
- INTERFEROMETERS**
- Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
[NASA-CASE-XGS-03532] c14 N71-17627
- Incremental motion drive system applied to interferometer components
[NASA-CASE-XNP-08897] c15 N71-17694
- Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170
- Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- Two beam interferometer-polarimeter
[NASA-CASE-NPO-11239] c14 N73-12446
- Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463
- INTERMEDIATE FREQUENCY AMPLIFIERS**
- Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c14 N74-20019
- INTERMETALLICS**
- Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
[NASA-CASE-MPS-20861-1] c18 N73-32437
- INTERNAL COMBUSTION ENGINES**
- Variable displacement fuel pump for internal combustion engines
[NASA-CASE-MSC-12139-1] c28 N71-14058
- Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMF-06926] c28 N71-22983
- Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-NPO-12072] c28 N72-22772
- INTERPLANETARY DUST**
- Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c14 N74-32886
- INTERPLANETARY FLIGHT**
- Thermoelectric power system --- for outer planet space flight
[NASA-CASE-MPS-22002-1] c03 N74-18726
- INTERPLANETARY SPACE**
- Compact heat shielding for interplanetary space vehicles
[NASA-CASE-XMS-00486] c33 N70-33344
- Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- INTERPLANETARY SPACECRAFT**
- Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
- INTERPLANETARY TRAJECTORIES**
- Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394
- INTRA- AND EXTRAVEHICULAR ACTIVITY**
- Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012
- INVERTED CONVERTERS (DC TO AC)**
- Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c14 N74-18090
- Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MPS-22088-1] c33 N75-15874
- INVERTERS**
- Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984
- Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254
- IODINE**
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[NASA-CASE-NPO-10373] c03 N71-18698
- Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
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- Apparatus for producing high purity I-123 from Xe-123 by bombarding tellurium target with cyclotron beam
[NASA-CASE-LEW-10518-2] c24 N72-28714
- Production of I-123 for use as radiopharmaceutical for low radiation exposure
[NASA-CASE-LEW-10518-1] c24 N72-33681
- Production of iodine isotope by high energy bombardment of cesium heat pipe causing spallation reaction
[NASA-CASE-LEW-11390-2] c24 N73-20763
- Heat pipe production of high purity radioiodine for thyroid measurements
[NASA-CASE-LEW-11390-3] c11 N73-28128
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ION CHARGE

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[NASA-CASE-XNP-04124] c28 N71-21822
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- Development and characteristics of apparatus for ionization analysis
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- Ionization control system design for monitoring separately located ion gage pressures on vacuum chambers
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- Development and characteristics of apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464
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[NASA-CASE-ERC-10013] c09 N71-26678

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- Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884
- Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641

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- Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-MSC-10960-1] c03 N71-24718
- Process for fabricating matched pairs of dished screen and accelerator grids for ion thruster accelerator system
[NASA-CASE-LEW-11694-1] c28 N73-22721
- Method of making dished ion thruster grids
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[NASA-CASE-XNP-00738] c09 N70-38201
- Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MPS-21364-1] c15 N74-18126

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- Lightweight, rugged, inexpensive satellite battery for producing electrical power from ionosphere using electrodes with different contact potentials
[NASA-CASE-XGS-01593] c03 N70-35408

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- Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477

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- Waveguide, thin film window and microwave irises
[NASA-CASE-LAR-10513-1] c07 N72-25170
- Development of thin film microwave iris installed in microwave waveguide transverse to flow of energy in waveguide
[NASA-CASE-LAR-10511-1] c09 N72-29172

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- System for recovering oxygen and/or water from extraterrestrial soil and iron oxide materials
[NASA-CASE-MSC-12332-1] c15 N72-15476

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- Solar sensor with coarse and fine sensing elements for matching preirradiated cells on degradation rates
[NASA-CASE-XLA-01584] c14 N71-23269
- Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
[NASA-CASE-MPS-20095] c24 N72-11595

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- [NASA-CASE-LEW-10906-1] c06 N74-30502

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- Fire retardant polyisocyanurate foam with high temperature resistance
[NASA-CASE-ARC-10280-1] c18 N70-34695

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- Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781

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- Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MPS-11492] c06 N73-30102

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- Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover
[NASA-CASE-MPS-20355] c33 N71-25353

J

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- Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788

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- Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332
- Jet aircraft exhaust nozzle for noise reduction
[NASA-CASE-LAR-10951-1] c28 N73-19819
- Development of aircraft configuration for reduction of jet aircraft noise by exhausting engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
- Method and apparatus for improving operating efficiency and reducing low speed noise for turbine aircraft engines
[NASA-CASE-LAR-11310-1] c28 N73-31699
- Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c02 N74-32418
- Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c28 N74-33218
- Instrumentation for measurement of aircraft noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614

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- Fluid jet amplifier with fluid from jet nozzle deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466
- Fluid control jet amplifiers
[NASA-CASE-XLE-09341] c12 N71-28741

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- Separation mechanism for use between stages of multistage rocket vehicles
[NASA-CASE-XLA-00188] c15 N71-22874

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- Attitude control device for space vehicles
[NASA-CASE-XNP-00294] c21 N70-36938

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- Absorptive, nonreflecting barrier mounted between closely spaced jet engines on supersonic aircraft, for preventing shock wave interference
[NASA-CASE-XLA-02865] c28 N71-15563
- Development of thrust dynamometer for measuring performance of jet and rocket engines
[NASA-CASE-XLE-05260] c14 N71-20429
- Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
- Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28545
- Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c28 N74-31270

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- Development of aircraft configuration for reduction of jet aircraft noise by exhausting engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
- Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c02 N74-27490

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[NASA-CASE-XLA-00087] c02 N70-33332

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[NASA-CASE-NPO-11556] c12 N72-25292

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[NASA-CASE-XLE-03583] c31 N71-17629

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[NASA-CASE-ARC-10442-1] c14 N74-15093

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[NASA-CASE-LAR-11674-1] c28 N74-33220

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[NASA-CASE-XLA-01163] c21 N71-15582

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[NASA-CASE-XMP-01598] c21 N71-15583

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[NASA-CASE-XMP-03169] c31 N71-15675

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[NASA-CASE-LAR-11465-1] c15 N74-32926

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[NASA-CASE-LEW-11065-1] c03 N72-11064

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[NASA-CASE-XLA-05332] c05 N71-11194

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[NASA-CASE-LAR-10007-1] c05 N71-11195

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[NASA-CASE-XLE-03778] c09 N69-21542

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[NASA-CASE-XNP-00416] c15 N70-36947

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[NASA-CASE-XMP-01452] c15 N70-41371

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[NASA-CASE-XMS-09636] c05 N71-12344

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[NASA-CASE-XNP-10475] c15 N71-24679

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[NASA-CASE-XMP-05114-2] c15 N71-26148

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[NASA-CASE-XNP-01855] c15 N71-28937

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[NASA-CASE-XNP-02278] c15 N71-28951

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[NASA-CASE-LAR-10900-1] c15 N74-23064

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- Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
- Method and apparatus for optically modulating light or microwave beam
[NASA-CASE-GSC-10216-1] c23 N71-26722
- Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135
- Optical communication system with gas filled waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
- Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536
- Development of acoustical controlled distributed feedback laser with continuous frequency spectrum tuning
[NASA-CASE-NPO-13175-1] c16 N73-27431
- Performance of ac power supply developed for CO2 laser system
[NASA-CASE-GSC-11222-1] c16 N73-32391
- Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
[NASA-CASE-NPO-11317-2] c16 N74-13205
- Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c16 N74-16187
- Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c14 N74-20009
- Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c33 N74-27425
- Clear air turbulence detector
[NASA-CASE-MPS-21244-1] c36 N75-15028
- Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
- Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
[NASA-CASE-LAR-11341-1] c36 N75-19655

LASER RANGER/TRACKER

Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125

LASERS

Laser device for removing material from rotating object for dynamic balancing
[NASA-CASE-NPS-11279] c16 N71-20400
Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170
Self-generating optical frequency waveguide
[NASA-CASE-HQN-10541-1] c07 N71-26291
Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
[NASA-CASE-NPO-10417] c16 N71-33410
Optical sensing of supersonic flows by correlating deflections in laser beams through flow
[NASA-CASE-NPS-20642] c14 N72-21407
Laser technique for breaking ice in ship path
[NASA-CASE-LAR-10815-1] c16 N72-22520
Development of acoustical controlled distributed feedback laser with continuous frequency spectrum tuning
[NASA-CASE-NPO-13175-1] c16 N73-27431
Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-10790-1] c16 N74-11313
Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c16 N74-15145
Testing device using X-ray lasers
[NASA-CASE-NPS-22409-1] c16 N74-18153
Long range laser traversing system
[NASA-CASE-GSC-11262-1] c16 N74-21091
Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c07 N74-22827
Schottky barrier laser energy converter
[NASA-CASE-NPO-13390-1] c16 N74-32937
Double discharge metal vapor laser with metal halide as a lasing
[NASA-CASE-NPO-13448-1] c16 N74-34012
Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N75-13243
Method and apparatus for generating coherent radiation in the ultraviolet region and above by use of distributed feedback
[NASA-CASE-NPO-13346-1] c70 N75-16307
Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652
Laser system with an antiresonant optical ring
[NASA-CASE-HQN-10844-1] c36 N75-19653

LATCHES

Bolt-latch mechanism for releasing despin weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
[NASA-CASE-NPS-11132] c15 N71-17649
Design, development, and characteristics of latching mechanism for operation in limited access areas
[NASA-CASE-XMS-03745] c15 N71-21076
Latching mechanism with pivoting catch and self-contained spring ejector
[NASA-CASE-XLA-03538] c15 N71-24897
Latch for fastening spacecraft docking rings
[NASA-CASE-MSC-15474-1] c15 N71-26162
Latch mechanism
[NASA-CASE-MSC-12549-1] c15 N74-27903
Latching device
[NASA-CASE-NPS-21606-1] c37 N75-19685

LATERAL CONTROL

Three-axis controller operated by hand-wrist

motion for yaw, pitch, and roll control
[NASA-CASE-IAC-01404] c05 N70-41581
Star sensor system for roll attitude control of spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088

LATERAL STABILITY

Strapped down gyroscope aligned with sun and star tracker optical axis calibrating roll, yaw and pitch values
[NASA-CASE-ARC-10716-1] c31 N73-32784
Variable dihedral shuttle orbiter --- for flight at hypersonic and subsonic speeds
[NASA-CASE-LAR-10706-1] c18 N75-16613

LATHES

Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489

LAUNCH ESCAPE SYSTEMS

Emergency escape cabin system for launch towers
[NASA-CASE-XKS-02342] c05 N71-11199
Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight
[NASA-CASE-XMS-04625] c05 N71-20718

LAUNCH VEHICLES

Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
Microleak detector mounted on weld seam of propellant tank of launch vehicle
[NASA-CASE-XMP-02307] c14 N71-10779

LAUNCHING PADS

Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XMP-03198] c30 N70-40353
Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
[NASA-CASE-XKS-10543] c07 N71-26292

LEAD TELLURIDES

Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
Procedure for segmenting lead telluride and silicon germanium thermoelectric elements to obtain composite elements effective over wide temperature range
[NASA-CASE-XGS-05718] c26 N71-16037

LEADING EDGES

Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497

LEAKAGE

Rocket chamber leak test fixture using tubular plug
[NASA-CASE-XPR-09479] c14 N69-27503
Microleak detector mounted on weld seam of propellant tank of launch vehicle
[NASA-CASE-XMP-02307] c14 N71-10779
Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161
Development of apparatus and method for testing leakage of large tanks
[NASA-CASE-XMP-02392] c32 N71-24285
Gas leak detection in evacuated systems using ultraviolet radiation probe

- [NASA-CASE-ERC-10034] c15 N71-24896
Method for locating leaks in hermetically sealed containers
[NASA-CASE-ERC-10045] c15 N71-24910
Volume displacement transducer for leak detection in hermetically sealed semiconductor devices
[NASA-CASE-ERC-10033] c14 N71-26672
Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
Leak detector
[NASA-CASE-NFS-21761-1] c35 N75-15931
Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612
- LENSES**
Lens assembly for solar furnace or solar simulator
[NASA-CASE-XNP-04111] c14 N71-15622
Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XNP-03844-1] c14 N71-26474
Development and characteristics of Petzval type objective including field shaping lens for focusing light of specified wavelength band on curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Photographic film restoration system using Fourier transformation lenses and spatial filter
[NASA-CASE-MSC-12448-1] c14 N72-20394
Plural beam antenna with parabolic reflectors
[NASA-CASE-GSC-11013-1] c09 N73-19234
- LENTICULAR BODIES**
Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924
- LEVEL (HORIZONTAL)**
Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
- LEVEL (QUANTITY)**
Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-XMS-06236] c14 N71-21007
Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XNP-14301] c09 N71-23188
- LEVELING**
Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610
Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484
Automatically operable self-leveling load table
[NASA-CASE-NFS-22039-1] c09 N75-12968
- LIFE (DURABILITY)**
Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c15 N74-21064
- LIFE DETECTORS**
Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions
[NASA-CASE-XGS-05533] c04 N69-27487
Describing method for lyophilization of luciferase containing mixtures for use in life detection reactions
[NASA-CASE-IGS-05532] c06 N71-17705
- LIFE RAFTS**
Design of inflatable life raft for aircrafts and boats
[NASA-CASE-XMS-00863] c05 N70-34857
Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c05 N74-14845
- LIFE SUPPORT SYSTEMS**
Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203
Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
[NASA-CASE-MSC-12243-1] c05 N71-24728
Development of improved convolute section for pressurized suits to provide high degree of mobility in response to minimum of applied torque
[NASA-CASE-XMS-09637-1] c05 N71-24730
Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
Open loop life support subsystem using breathing bag as reservoir for EVA
[NASA-CASE-MSC-12411-1] c05 N72-20096
Device for removing air from water for use in life support systems in manned space flight
[NASA-CASE-XLA-8914] c15 N73-12492
Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c06 N74-12813
- LIFT DEVICES**
Device for handling heavy loads by distributing forces
[NASA-CASE-XNP-04969] c11 N69-27466
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XNP-00389] c31 N70-34176
Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110
Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
- LIFT DRAG RATIO**
Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere
[NASA-CASE-XLA-04901] c31 N71-24315
- LIFTING BODIES**
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XNP-00389] c31 N70-34176
Graphic illustration of lifting body design
[NASA-CASE-PRC-10063] c01 N71-12217
Static force balancing system attached to lifting body
[NASA-CASE-LAR-10348-1] c11 N73-12264
- LIFTING REENTRY VEHICLES**
Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-XAC-02058] c02 N71-16087
- LIGHT (VISIBLE RADIATION)**
Light baffle with oblate hemispheroid surface and shading flange
[NASA-CASE-NPO-10337] c14 N71-15604
Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
Method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
[NASA-CASE-XNP-04167-3] c25 N72-21693

LIGHT AIRCRAFT

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Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484

LIGHT AIRCRAFT
Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110

LIGHT BEAMS
Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206
Development and characteristics of optical communications system based on modulation of light beams
[NASA-CASE-XLA-01090] c16 N71-28963
Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131

LIGHT GAS GUNS
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578

LIGHT MODULATION
Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605
Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
Method and apparatus for optically modulating light or microwave beam
[NASA-CASE-GSC-10216-1] c23 N71-26722
Development and characteristics of optical communications system based on modulation of light beams
[NASA-CASE-XLA-01090] c16 N71-28963
Lamp modulator for generating visual indication of presence and magnitude of signal
[NASA-CASE-KSC-10565] c09 N72-25250
Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c07 N74-22827

LIGHT SOURCES
Light radiation direction indicator with baffle of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331
High intensity heat and light unit containing quartz lamp elements protectively positioned to withstand severe environmental stress
[NASA-CASE-XLA-00141] c09 N70-33312
Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089
Electro-optical detector for determining position of light source
[NASA-CASE-XNP-01059] c23 N71-21821
Optical system for selecting particular wavelength light beams from multiple wavelength light source
[NASA-CASE-ERC-10248] c14 N72-17323
Electro-optical stabilization of calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411
Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214
Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463
Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089

LIGHT TRANSMISSION
Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565
Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365
Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-IKS-03509] c14 N71-23175

Solar cell panel with light transmitting cover plate
[NASA-CASE-NPO-10747] c03 N72-22042
Method and system for transmitting and distributing optical frequency radiation
[NASA-CASE-HQM-10541-3] c23 N72-23695
Thin absorbing metallic film for increased visible light transmission
[NASA-CASE-LAR-10836-1] c26 N72-27784
Transmitting and reflecting diffuser --- for ultraviolet light
[NASA-CASE-LAR-10385-2] c23 N74-13436

LIGHTING EQUIPMENT
Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787
Pressurized inert gas feed for lighting system
[NASA-CASE-KSC-10644] c09 N72-27227

LIGHTNING
Apparatus for determining distance to lightning strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175
System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
Monitoring and recording lightning strokes in predetermined area
[NASA-CASE-KSC-10728-1] c14 N73-32319
Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c14 N74-22113

LIMITER CIRCUITS
Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
Circuits for amplitude limiting of random noise inputs
[NASA-CASE-NPO-10169] c10 N71-24844
Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895
Low level signal limiter
[NASA-CASE-XLE-04791] c14 N74-22096

LINEAR ACCELERATORS
Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962

LINEAR RECEIVERS
Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233

LINEAR SYSTEMS
Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503
Family of m-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254

LINEARITY
Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982
Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045

LINKAGES
Development of collapsible nozzle extension for rocket engines
[NASA-CASE-MFS-11497] c28 N71-16224
Design and construction of mechanical probe for determining if object is properly secured
[NASA-CASE-MFS-20760] c14 N72-33377

LINKS
Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c07 N74-30532

LIQUID BEARINGS
Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359

LIQUID COOLING
Water cooled contactors for holding rotating carbon arc anode
[NASA-CASE-XMS-03700] c15 N69-24266
External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372

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LIQUID PROPELLANT ROCKET ENGINES

Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929

Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NPO-10122] c12 N71-17631

Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439

Electric power system with circulatory liquid coolant cooling system
[NASA-CASE-MPS-14114-2] c09 N71-24807

Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MPS-14114] c33 N71-27862

Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152

Automatic control device for regulating inlet water temperature of liquid cooled spacesuit
[NASA-CASE-MSC-13917-1] c05 N72-15098

Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] c05 N73-26071

LIQUID CRYSTALS

Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410

Input signal measurement using liquid crystalline elements
[NASA-CASE-ERC-10275] c26 N72-25680

Real time liquid crystal image converter
[NASA-CASE-LAR-11206-1] c23 N74-30118

LIQUID FILLED SHELLS

Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910

Design and development of fluid sample collector
[NASA-CASE-XMS-06767-1] c14 N71-20435

Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835

Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-HQN-10780] c14 N71-30265

LIQUID FLOW

Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988

Liquid junction for glass electrode or pH meters
[NASA-CASE-NPO-10682] c15 N70-34699

Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-XHQ-01208] c15 N70-35409

Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492

Positive displacement flowmeter for measuring extremely low flows of fluid with self calibrating features
[NASA-CASE-XMP-02822] c14 N70-41994

High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074

Carrier liquid system containing bodies of ablative material
[NASA-CASE-LEW-10359-2] c33 N73-25952

Zero gravity liquid transfer device, using spiral shaped screen
[NASA-CASE-KSC-10626] c14 N73-27378

System for measuring Reynolds stress in a turbulently flowing fluid --- signal processing
[NASA-CASE-ARC-10755-2] c34 N75-16770

LIQUID HELIUM

Heat operated cryogenic electrical generator --- using liquid helium conversion
[NASA-CASE-NPO-13303-1] c03 N74-19701

LIQUID HYDROGEN

Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMP-05046] c33 N71-28892

Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MPS-21364-1] c15 N74-18126

LIQUID INJECTION

Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294

System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLE-01163] c21 N71-15582

Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-XMP-00968] c28 N71-15660

LIQUID LASERS

Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343

LIQUID LEVELS

Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10590

LIQUID METALS

Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983

Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803

Analytical test apparatus and method for determining oxygen content in alkali liquid metal
[NASA-CASE-XLE-01997] c06 N71-23527

Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MPS-14114] c33 N71-27862

Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

Shell-side liquid metal boiler employing tube and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20915

U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129

Electromagnetic flow rate meter --- for liquid metals
[NASA-CASE-LEW-10981-1] c14 N74-21018

LIQUID NITROGEN

Transferring liquid nitrogen through vacuum chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484

LIQUID OXYGEN

Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMP-02221] c18 N71-27170

LIQUID PHASES

Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635

Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975

Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199

LIQUID PROPELLANT ROCKET ENGINES

High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284

Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-XMP-00185] c21 N70-34539

Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-XMP-00148] c28 N70-38710

Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-XNP-01390] c28 N70-41275

Rocket propellant injector with porous faceplate for rocket engine combustion chamber
[NASA-CASE-LEW-11071-1] c27 N73-27695

Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c28 N74-13502

LIQUID ROCKET PROPELLANTS

SUBJECT INDEX

Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329

LIQUID ROCKET PROPELLANTS

Propellant injectors for rocket combustion chambers
[NASA-CASE-XLE-00103] c28 N70-33241

Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910

Igniter capsule for chemical ignition of liquid rocket propellants
[NASA-CASE-XLE-00323] c28 N70-38505

High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925

Compact high pressure filter for rocket fuel lines
[NASA-CASE-XNP-00732] c28 N70-41447

Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646

Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XMP-01899] c31 N70-41948

Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635

Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654

Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569

Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNP-01747] c15 N71-23024

Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339

Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MFS-11204] c14 N71-29134

LIQUID SLOSHING

Slosh damping method for liquid rocket propellant tanks
[NASA-CASE-XMP-00658] c12 N70-38997

Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103

Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106

Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802

Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569

Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387

LIQUID-GAS MIXTURES

Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062

Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions
[NASA-CASE-XMS-01492] c05 N70-41297

Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646

Liquid-gaseous centrifugal separator for weightlessness environment
[NASA-CASE-XLA-00415] c15 N71-16079

Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer

[NASA-CASE-XMP-04042] c15 N71-23023

LIQUID-VAPOR INTERFACES

Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968

Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294

Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MFS-11204] c14 N71-29134

LIQUIDS

Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062

Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610

Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184

Quantitative liquid measurements in container by resonant frequencies
[NASA-CASE-XNP-02500] c18 N71-27397

Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
[NASA-CASE-MSC-11847-1] c14 N72-11363

Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface
[NASA-CASE-LEW-10359] c33 N72-25911

Pressurized tank for feeding liquid waste into processing equipment
[NASA-CASE-LAR-10365-1] c05 N72-27102

Apparatus for mixing two or more liquids under zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458

Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c15 N74-15126

Method and device for detection of surface discontinuities or defects
[NASA-CASE-MSC-14187-1] c14 N74-32879

Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611

LITHIUM COMPOUNDS

Utilization of lithium p-lithiphenoxide to prepare star polymers
[NASA-CASE-NPO-10998-1] c06 N73-32029

LOAD DISTRIBUTION (FORCES)

Force measuring instrument for structural members, particularly fastening bolts or studs
[NASA-CASE-XMP-00456] c14 N70-34705

Multiple Belleville spring assembly with even load distribution
[NASA-CASE-XNP-00840] c15 N70-38225

LOAD TESTING MACHINES

Load cell protection device using spring-loaded breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974

Development of device for transferring load from load cell to bypass mechanism
[NASA-CASE-XMS-06329-1] c15 N71-20441

Method and apparatus for tensile testing of metal foil
[NASA-CASE-LAR-10208-1] c14 N74-30894

LOAD TESTS

Differential pressure cell insensitive to changes in ambient temperature and extreme overload
[NASA-CASE-XAC-00042] c14 N70-34816

LOADING OPERATIONS

Air bearings for near frictionless transfer of loads from one body to another
[NASA-CASE-XMP-01887] c15 N71-10617

LOADS (FORCES)

Device for handling heavy loads by distributing forces
[NASA-CASE-XNP-04969] c11 N69-27466

Two plane balance for simultaneous measurements of multiple forces
[NASA-CASE-XAC-00073] c14 N70-34813

- Improving load capacity and fatigue life of rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
- Development of device for transferring load from load cell to bypass mechanism
[NASA-CASE-XMS-06329-1] c15 N71-20441
- Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191
- Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490
- Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
- Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432
- Energy absorption device in high precision gear train for protection against damage to components caused by stop loads
[NASA-CASE-XNP-01848] c15 N71-28959
- Air bearing for use in exterior environment for moving heavy loads
[NASA-CASE-WLP-10002] c15 N72-17451
- Measuring device for bearing preload using spring washers
[NASA-CASE-MPS-20434] c11 N72-25288
- Variable direction force coupler for transmitting force along selectable curve path
[NASA-CASE-MPS-20317] c15 N73-13463
- Turnbuckle device for tensile stress load measurements
[NASA-CASE-MPS-21488-1] c14 N73-23526
- Versatile ergometer with work load control
[NASA-CASE-MPS-21109-1] c05 N73-27941
- Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c14 N74-13129
- G-load measuring and indicator apparatus --- for aircraft
[NASA-CASE-ARC-10806] c14 N74-27872
- LOCATING SYSTEM**
- System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
- Position determination systems --- using orbital antenna scan of celestial body
[NASA-CASE-MSC-12593-1] c09 N74-14942
- Aircraft mounted crash activated transmitter device
[NASA-CASE-MPS-16609-3] c09 N74-34647
- LOCKING**
- Releasable coupling device designed to receive and retain matching ends of electrical connectors
[NASA-CASE-XMS-07846-1] c09 N69-21927
- LOCKS (PASTENERS)**
- Ball locking device which releases in response to small forces when subjected to high axial loads
[NASA-CASE-XNP-01371] c15 N70-41829
- Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
- Locking device for retaining turbine rotor blades on turbine wheel
[NASA-CASE-XNP-00816] c28 N71-28928
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- Design of quick release locking pin for joining two or more load-carrying structural members
[NASA-CASE-MPS-18495] c15 N72-11385
- LOCOMOTION**
- Jet shoes for space locomotion
[NASA-CASE-XLA-08491] c05 N69-21380
- Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XNS-02977] c11 N71-10746
- Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119
- LOGARITHMS**
- Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
[NASA-CASE-ERC-10267] c09 N72-23173
- LOGIC CIRCUITS**
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
- Counter-divisor circuit for accuracy and reliability in binary circuits
[NASA-CASE-XNP-00421] c09 N70-34502
- Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
[NASA-CASE-XNP-00432] c08 N70-35423
- Conversion system for increasing resolution of analog to digital converters
[NASA-CASE-XAC-00404] c08 N70-40125
- Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494
- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
- Bistable multivibrator circuits operating at high speed and low power dissipation
[NASA-CASE-XGS-00823] c10 N71-15910
- Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
- Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
- Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751
- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-XNP-08567] c09 N71-26000
- Logic circuit for generating multibit binary code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103
- Adaptive signal generating system and logic circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374
- Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Logical function and circuit generator
[NASA-CASE-XLA-05099] c09 N73-13209
- A synchronous binary array divider
[NASA-CASE-ERC-10180-1] c08 N74-20836
- Computer interface system --- using asynchronous clocks
[NASA-CASE-NPO-13428-1] c08 N74-30549
- Four phase logic systems --- including integrated microcircuits
[NASA-CASE-MSC-14240-1] c33 N75-14957
- LONGITUDINAL CONTROL**
- Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581
- LOOP ANTENNAS**
- Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XNP-00437] c07 N70-40202
- Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113
- LOOPS**
- Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-XGS-00769] c14 N70-41647

- Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-IGS-01223] c07 N71-10609
- Filter for third order phase locked loops in signal receivers
[NASA-CASE-NPO-11941-1] c10 N73-27171
- High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ARC-10516-1] c23 N74-21300
- Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
[NASA-CASE-LAR-10168-1] c09 N74-22865
- LOW ASPECT RATIO**
- Aerospace configuration with low and high aspect ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286
- Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
- LOW COST**
- Low cost efficient thermionic converter for use in nuclear reactors
[NASA-CASE-NPO-13121-1] c22 N73-12702
- LOW DENSITY MATERIALS**
- Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MPS-20044] c14 N71-28993
- Mixing insert for foam dispensing apparatus
[NASA-CASE-MPS-20607-1] c15 N74-26989
- Intumescent composition, foamed product prepared therewith and process for making same
[NASA-CASE-ARC-10304-2] c18 N74-27037
- LOW FREQUENCIES**
- Determining sway of buildings by low frequency device using pendulum
[NASA-CASE-XMP-00479] c14 N70-34794
- LOW MOLECULAR WEIGHTS**
- Process for preparing high molecular weight polyaryloxysilanes from lower molecular weight forms
[NASA-CASE-XMP-08674] c06 N71-28807
- LOW NOISE**
- Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229
- LOW PRESSURE**
- Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-PRC-10022] c12 N71-26546
- LOW SPEED**
- Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
- Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XMP-02966] c10 N71-24863
- LOW TEMPERATURE**
- Low to high temperature energy conversion system --- using ammonia
[NASA-CASE-NPO-13510-1] c44 N75-16972
- LOW TEMPERATURE ENVIRONMENTS**
- Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-IGS-10010] c03 N72-15986
- LOW TEMPERATURE TESTS**
- Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMP-02964] c14 N71-17659
- Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XMP-10968] c14 N71-24234
- LOW VACUUM**
- Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673
- LOW VOLTAGE**
- High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
- Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
[NASA-CASE-MSC-12101] c09 N71-18720
- Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- LUBRICANTS**
- Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
- Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
- Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MPS-21040-1] c06 N73-30098
- Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MPS-22411-1] c15 N74-21058
- Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c15 N74-21061
- LUBRICATING OILS**
- Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XLE-05130-2] c15 N71-19570
- LUBRICATION**
- Hollow high strength rolling elements for antifriction bearings fabricated from preformed components
[NASA-CASE-LEW-11026-1] c15 N73-33383
- Variable resistance constant tension and lubrication device --- using oil-saturated leather wiper
[NASA-CASE-KSC-10723-1] c37 N75-13265
- LUBRICATION SYSTEMS**
- Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
[NASA-CASE-XMP-01641] c15 N71-22997
- Lubrication for bearings by capillary action from oil reservoir of porous material
[NASA-CASE-XMP-03972] c15 N71-23048
- Journal Bearings
[NASA-CASE-LEW-11076-2] c15 N74-32921
- LUMINAIRES**
- Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499
- Development of ultraviolet resonance lamp with improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521
- Lamp modulator for generating visual indication of presence and magnitude of signal
[NASA-CASE-KSC-10565] c09 N72-25250
- Electrodeless lamp circuit driven by induction
[NASA-CASE-MPS-21214-1] c09 N73-30181
- LUMINOUSITY**
- Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- LUMINOUS INTENSITY**
- Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
[NASA-CASE-XLA-00062] c14 N70-33254
- Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XMP-06510] c14 N71-23797
- LUNAR BASES**
- Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046
- LUNAR COMMUNICATION**
- Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
- Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MPS-21042] c07 N72-25171
- LUNAR COMPOSITION**
- Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765

LUNAR EXPLORATION

- Backpack carrier with retractable legs suitable for lunar exploration and convertible to rescue vehicle
[NASA-CASE-LAR-10056] c05 N71-12351
- Development and characteristics of penetrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
- Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-MPS-20130] c28 N71-27585
- Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MPS-21042] c07 N72-25171

LUNAR GRAVITATION

- Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474

LUNAR GRAVITY SIMULATOR

- Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786

LUNAR LANDING

- Lunar landing flight research vehicle
[NASA-CASE-XPR-00929] c31 N70-34966

LUNAR LOGISTICS

- Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-MPS-20130] c28 N71-27585

LUNAR ROCKS

- Impact bit for cutting, collecting, and storing samples such as lunar rock cuttings
[NASA-CASE-XNP-01412] c15 N70-42034

LUNAR SOIL

- Development of device for separating, collecting, and viewing soil particles
[NASA-CASE-XNP-09770] c15 N71-20440
- Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036
- System for recovering oxygen and/or water from extraterrestrial soil and iron oxide materials
[NASA-CASE-MSC-12332-1] c15 N72-15476
- Portable penetrometer for analyzing soil characteristics
[NASA-CASE-MPS-20774] c14 N73-19420
- Method for obtaining oxygen from lunar or similar soil
[NASA-CASE-MSC-12408-1] c13 N74-13011

LUNAR SURFACE VEHICLES

- Resilient vehicle wheel for lunar surface travel
[NASA-CASE-MPS-20400] c31 N71-18611
- Resilient wheel design with woven wire tire and abrasive treads for lunar surface vehicles
[NASA-CASE-MPS-13929] c15 N71-27091

LUNGS

- Piston device for producing known constant positive pressure within lungs by using thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329

M

MACHINE TOOLS

- Rotary impact-type rock drill for recovering rock cuttings
[NASA-CASE-XNP-07478] c14 N69-21923
- Description of protective device for providing safe operating conditions around work piece in machine or metal working tool
[NASA-CASE-XLE-01092] c15 N71-22797
- Description of device for aligning stacked sheets of paper for repetitive cutting
[NASA-CASE-XMS-04178] c15 N71-22798
- Development and characteristics of frusto-conical die nib for extrusion of refractory metals
[NASA-CASE-XLE-06773] c15 N71-23817
- Design and development of layout tool for machine shop use to locate point in precise reference to straight or bowed reference edge
[NASA-CASE-PRC-10005] c15 N71-26145
- Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673

Caterpillar micropositioner for positioning machine tools adjacent to workpiece

- [NASA-CASE-GSC-10780-1] c14 N72-16283
- Geneva mechanism --- including star wheel and driver
[NASA-CASE-NPO-13281-1] c37 N75-13266

MACHINERY

- Design of mechanical device for stirring several test tubes simultaneously
[NASA-CASE-XAC-06956] c15 N71-21177
- Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334
- Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c15 N74-32917

MACHINING

- Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135
- Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489
- Drilled ball bearing with a one piece anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c15 N74-18133

MAGNESIUM

- Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

MAGNESIUM ALLOYS

- Procedure for bonding polytetrafluoroethylene thermal protective sleeves to magnesium alloy conical shell components with different thermal coefficients
[NASA-CASE-XLA-01262] c15 N71-21404
- Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

MAGNESIUM OXIDES

- Method for determining presence and type of OH in MgO
[NASA-CASE-NPO-10774] c06 N72-17095

MAGNET COILS

- Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890

MAGNETIC CHARGE DENSITY

- Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043

MAGNETIC CIRCUITS

- Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043

MAGNETIC COILS

- Time division multiplexer with magnetic latching relays
[NASA-CASE-XNP-00431] c09 N70-38998
- Linear magnetic braking system with nonuniformly wrapped primary coil producing constant braking force on secondary coil
[NASA-CASE-XLE-05079] c15 N71-17652
- Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge
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[NASA-CASE-XLA-03660] c15 N71-21060
- Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
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- Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38995
- Electronic counter circuit utilizing magnetic core and low power consumption
[NASA-CASE-XNP-08836] c09 N71-12515

- Pulsed magnetic core memory element with blocking oscillator feedback for interrogation without loss of digital information
[NASA-CASE-IGS-03303] c08 N71-18595
- Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NPO-10201] c08 N71-18694
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[NASA-CASE-XNP-01318] c10 N71-23033
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[NASA-CASE-ERC-10075] c09 N71-24800
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[NASA-CASE-NPO-10242] c09 N71-24803
- Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893
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[NASA-CASE-XAC-03740] c14 N71-26135
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[NASA-CASE-ERC-10089] c23 N72-17747
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[NASA-CASE-XLE-01124] c28 N71-14043
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[NASA-CASE-XGS-07514] c23 N71-16099
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- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
- Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911

METAL SHEETS

SUBJECT INDEX

Method to produce high purity copper fluoride by heating copper hydroxyfluoride powder and subjecting to flowing fluorine gas
[NASA-CASE-LEW-10794-1] c06 N72-17093

Producing metal powders of controlled particle size by reducing oxide using reactive metal vapor in vacuum
[NASA-CASE-XLE-06461] c17 N72-22530

Development of apparatus for producing metal powder particles of controlled size
[NASA-CASE-XLE-06461-2] c17 N72-28535

Metal plating process employing spraying of metallic power/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360

METAL SHEETS

Fatigue testing apparatus with light shield and infrared reflector for high temperature evaluation of loaded sheet samples
[NASA-CASE-XLA-01782] c14 N71-26136

Processes for making metal sheets or plaques with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c15 N71-34427

Method of making pressure tight seal for super alloy
[NASA-CASE-LAR-10170-1] c15 N74-11301

Method of making an explosively welded scarf joint
[NASA-CASE-LAR-11211-1] c37 N75-12326

METAL SHELLS

A heat exchanger and method of making
[NASA-CASE-LEW-12441-1] c34 N75-19580

METAL SPINNING

Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XMP-01083] c15 N71-22723

METAL STRIPS

Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411

Metal strip mounting arrangement for solar cell arrays on spacecraft
[NASA-CASE-XGS-01475] c03 N71-11058

Forming tubes from long thin flat metal strips
[NASA-CASE-XGS-04175] c15 N71-18579

High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ARC-10516-1] c23 N74-21300

METAL SURFACES

Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465

Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830

High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875

Method for treating metal surfaces to prevent secondary electron transmission
[NASA-CASE-XNP-09469] c24 N71-25555

Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312

Anodizing method for providing metal surfaces with temperature reducing coatings against flames
[NASA-CASE-XLE-00035] c33 N71-29151

Thin film gauge --- for measuring convective heat transfer rates along test surfaces in wind tunnels
[NASA-CASE-NPO-10617-1] c14 N74-22095

METAL VAPORS

Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983

Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
[NASA-CASE-XLE-00010] c15 N70-33382

Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c16 N74-16187

Double discharge metal vapor laser with metal halide as a lasant
[NASA-CASE-NPO-13448-1] c16 N74-34012

METAL WORKING

Controlled arc spot welding method
[NASA-CASE-XMP-00392] c15 N70-34814

Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XMP-05114] c15 N71-17650

Description of protective device for providing safe operating conditions around work piece in machine or metal working tool
[NASA-CASE-XLE-01092] c15 N71-22797

Description of portable milling tool for milling tube or pipe ends to desired shape and thickness
[NASA-CASE-XMP-03511] c15 N71-22799

Development and characteristics of frusto-conical die nib for extrusion of refractory metals
[NASA-CASE-XLE-06773] c15 N71-23817

Portable magnetomotive hammer for metal working
[NASA-CASE-XMP-03793] c15 N71-24833

Method and apparatus for portable high precision magnetomotive bulging, constricting, and joining of large diameter metal tubes
[NASA-CASE-XMP-05114-3] c15 N71-24865

Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c15 N74-22147

Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-MPS-21485-1] c15 N74-25968

METAL-METAL BONDING

Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MPS-07369] c15 N71-20443

Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
[NASA-CASE-XMP-01402] c18 N71-21651

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-2] c15 N74-34002

METALLOGRAPHY

Development of method for etching copper
[NASA-CASE-XGS-06306] c17 N71-16044

METALLOSILOXANE POLYMER

Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MPS-22411-1] c15 N74-21058

METALLURGY

Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267

METALS

Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226

Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710

Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811

Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408

Development of performed attachable thermocouple from thermoelectrically different metals
[NASA-CASE-LEW-11072-2] c14 N72-28443

Metal plating process employing spraying of metallic power/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360

Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c15 N74-21063

Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NPO-11758-1] c15 N74-23065

Production of pure metals
[NASA-CASE-LEW-10906-1] c06 N74-30502

METEORITE COLLISIONS

Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
[NASA-CASE-NPO-12127-1] c14 N74-13130

METEORITES

Method for making pressurized meteoroid penetration detector panels
[NASA-CASE-XLA-08916] c15 N71-29018

METEORITIC DAMAGE

Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797

METEOROID HAZARDS

Contrast color coating for meteoroid impact position locator for space vehicles
[NASA-CASE-LAR-10629-1] c14 N73-32348

METEOROID PROTECTION

Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679
Development of composite structures for spacecraft to serve as anti-meteoroid device
[NASA-CASE-LAR-10788-1] c31 N73-20880

METEOROLIDS

Cameras for photographing meteors in selected sky area
[NASA-CASE-LAR-10226-1] c14 N73-19419
Spaceflight meteoroid composition experiment --- characteristics of device for capturing meteoroid particles in space
[NASA-CASE-MSC-12423-1] c14 N74-32885

METEOROLOGICAL BALLOONS

Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XMP-04163] c02 N71-23007

METHANE

High temperature gas lubricant consisting of two fluoro-bromo-methanes
[NASA-CASE-XLE-00353] c18 N70-39897

MICHELSON INTERFEROMETERS

Michelson interferometer with photodetector for optical direction sensing
[NASA-CASE-NPO-10320] c14 N71-17655
Servo system for retroreflector of Michelson interferometer
[NASA-CASE-NPO-10300] c14 N71-17662
Computerized optical system for producing multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661

MICROBALANCES

Null-type vacuum microbalance for measuring minute mechanical displacements
[NASA-CASE-XAC-00472] c15 N70-40180

MICROBIOLOGY

Development of variable angle device for positioning test tubes to permit optimum drying of culture medium
[NASA-CASE-LAR-10507-1] c11 N72-25284
Apparatus for microbiological sampling --- including automatic swabbing
[NASA-CASE-LAR-11069-1] c35 N75-12272
Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor
[NASA-CASE-LAR-11074-1] c51 N75-13502

MICROELECTRONICS

Separation of semiconductor wafer into chips bounded by scribe lines
[NASA-CASE-ERC-10138] c26 N71-14354
Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234
Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-XMP-05999] c15 N71-29032
Precision surface cutter for screen circuit negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485
Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762
Active tuned circuits for microelectronic construction
[NASA-CASE-GSC-11340-1] c10 N72-33230
Organic amine and nitroaromatic mixed compound for heat change detection in microelectronic components
[NASA-CASE-NPO-10764-2] c10 N73-20259

MICROFILMS

Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MFS-20240] c14 N71-26788

MICROMETEORITES

Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
[NASA-CASE-NPO-12127-1] c14 N74-13130

MICROMETEOROLIDS

Particle detector for measuring micrometeoroid velocity in space
[NASA-CASE-XLA-00495] c14 N70-41332
Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996
Development of large area micrometeoroid impact detector panels
[NASA-CASE-XLA-05906] c31 N71-16221
Rotary bead dropper and selector for testing micrometeorite transducers
[NASA-CASE-XGS-03304] c09 N71-22988
Measuring micrometeoroid depth of penetration into various materials
[NASA-CASE-XLA-00941] c14 N71-23240
Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
Cosmic dust analyzer using ion time of flight techniques to determine constituency of hypervelocity particles such as micrometeoroids
[NASA-CASE-MSC-13802-1] c30 N72-20805
Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477
Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
[NASA-CASE-LAR-10483-1] c14 N73-32327
Deployable pressurized cell structure for a micrometeoroid detector
[NASA-CASE-LAR-10295-1] c15 N74-21062
Spaceflight meteoroid composition experiment --- characteristics of device for capturing meteoroid particles in space
[NASA-CASE-MSC-12423-1] c14 N74-32885
Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c14 N74-32888

MICROMINIATURIZATION
Miniaturized radiometer for detecting low level thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484

MICROORGANISMS
Development of bacteriostatic conformal coating and methods of application
[NASA-CASE-GSC-10007] c18 N71-16046
Portable vacuum probe surface sampler for sampling large surface areas with relatively light loading densities of microorganisms
[NASA-CASE-LAR-10623-1] c14 N73-30395
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c14 N74-10422
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c04 N74-32518

MICROPARTICLES
Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936

MICROPHONES
Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234
Development of wind tunnel microphone structure to minimize effects of vibrations and eliminate unwanted signals in microphone output
[NASA-CASE-XNP-00250] c11 N71-28779
Adjustable frequency response microphone
[NASA-CASE-LAR-11170-1] c07 N74-12843

MICROSCOPES

Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
Hand-held, lightweight, portable photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361

MICROSTRUCTURE

Production of high strength refractory compounds and microconstituents into refractory metal matrix
[NASA-CASE-XLE-03940] c18 N71-26153
Development of procedure for improved distribution of refractory compounds and micro-constituents in refractory metal matrix
[NASA-CASE-XLE-03940-2] c17 N72-28536
Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
[NASA-CASE-LEW-11388-2] c15 N74-21055
Method of determining bond quality of power transistors attached to bed substrates --- X ray inspection of junction microstructure
[NASA-CASE-MPS-21931-1] c09 N74-21858

MICROTHRUST

Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213
Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766

MICROWAVE AMPLIFIERS

Thermally sensitive tuning probe for nullifying detuning effects in microwave cavity resonator of amplifier
[NASA-CASE-XNP-00449] c14 N70-35220

MICROWAVE ANTENNAS

Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices
[NASA-CASE-MPS-20333] c09 N71-13486
Development and characteristics of low-noise multimode monopulse antenna feed system for use with microwave communication equipment
[NASA-CASE-XNP-01735] c07 N71-22750
Microwave omnidirectional antenna for use on spacecraft
[NASA-CASE-XLA-03114] c09 N71-22888
Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
[NASA-CASE-XKS-10543] c07 N71-26292
Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
[NASA-CASE-NPO-11264] c07 N72-25174
Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247
Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130

MICROWAVE CIRCUITS

Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065

MICROWAVE COUPLING

Microwave waveguide switch with rotor position control
[NASA-CASE-XNP-06507] c09 N71-23548

MICROWAVE EQUIPMENT

Apparatus for generating microwave signals at progressively related phase angles for driving antenna array
[NASA-CASE-ERC-10046] c10 N71-18722
Broadband microwave waveguide window to compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808
Dual frequency feed systems for Cassegrainian antennas
[NASA-CASE-NPO-13091-1] c09 N73-12214
Refrigerated coaxial coupling --- for maser waveguide
[NASA-CASE-NPO-13504-1] c09 N74-27689

MICROWAVE FILTERS

Microwave power divider for providing variable output power to output waveguide in fixed waveguide system

[NASA-CASE-NPO-11031] c07 N71-33606
Selective bandpass resonators using bandstop resonator pairs for microwave frequency operation
[NASA-CASE-GSC-10990-1] c09 N73-26195

MICROWAVE FREQUENCIES

Varactor microwave frequency mixing circuit
[NASA-CASE-XGS-02171] c09 N69-24324
Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XER-07894] c09 N71-18721
Multimode antenna feed system for microwave and broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013

MICROWAVE OSCILLATORS

Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235
Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c09 N74-10195

MICROWAVE RADIOMETERS

Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774

MICROWAVE REFLECTOMETERS

Reflectometer for receiver input impedance match measurement
[NASA-CASE-XNP-10843] c07 N71-11267
Surface defect detection by reflected microwave radiation pattern
[NASA-CASE-ARC-10009-1] c15 N71-17822

MICROWAVE RESONANCE

Microwave double resonance spectroscopy absorption cell for gas analysis
[NASA-CASE-LAR-10305] c14 N71-26137

MICROWAVE SWITCHING

Design of gyrator circuit using operational amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517

MICROWAVE TUBES

Electrostatic charged particle collector containing stacked electrodes for microwave tube
[NASA-CASE-LEW-11192-1] c09 N73-13208

MICROWAVES

Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma
[NASA-CASE-XER-11019] c09 N71-23598
Method and apparatus for optically modulating light or microwave beam
[NASA-CASE-GSC-10216-1] c23 N71-26722
Microwave waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141
Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver
[NASA-CASE-MPS-21470-1] c10 N74-19870

MIDAIR COLLISIONS

Economical satellite aided vehicle avoidance system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631
Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641

MILLIMETER WAVES

Millimeter wave antenna system for spacecraft use
[NASA-CASE-GSC-10949-1] c07 N71-28965
Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c09 N74-32660

MILLING (MACHINING)

Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722

MILLING MACHINES

Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
[NASA-CASE-XMF-00908] c14 N70-40238
Description of portable milling tool for milling tube or pipe ends to desired shape and thickness
[NASA-CASE-XMF-03511] c15 N71-22799
Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c15 N74-27905

MINIATURE ELECTRONIC EQUIPMENT

Miniature solid state, direction sensitive,

- stress transducer design with bonded semiconductive piezoresistive element for sensing residual stresses
[NASA-CASE-XNP-02983] c14 N71-21091
- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- Solid state television camera system consisting of monolithic semiconductor mosaic sensor and molecular digital readout systems
[NASA-CASE-XNP-06092] c07 N71-24612
- Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ARC-10583-1] c05 N73-14093
- Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c54 N75-17102
- MINIATURIZATION**
- Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
- Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897
- Fast response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere
[NASA-CASE-MSC-13332-1] c14 N72-21408
- MIRRORS**
- Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
- Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
- Servo system for retroreflector of Michelson interferometer
[NASA-CASE-NPO-10300] c14 N71-17662
- Gas laser frequency stabilized by position of mirrors in resonant cavity
[NASA-CASE-XGS-03644] c16 N71-18614
- Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
- Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
- Optical range finder using reflective first surfaces mirror and transmitting beam splitter
[NASA-CASE-MSC-12105-1] c14 N72-21409
- Optical mirror support system
[NASA-CASE-XER-07896-2] c23 N72-22673
- Space mirrors
[NASA-CASE-MSC-12611-1] c23 N74-33142
- Strain gauge ambiguity sensor for segmented mirror active optical system
[NASA-CASE-MFS-20506-1] c35 N75-12273
- MISSILE CONTROL**
- Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c09 N74-20864
- MISSILE LAUNCHERS**
- Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XNP-03198] c30 N70-40353
- Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175
- Controlled release device for use in launching rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043
- MIXERS**
- Mixing insert for foam dispensing apparatus
[NASA-CASE-MFS-20607-1] c15 N74-26989
- MIXING CIRCUITS**
- Varactor microwave frequency mixing circuit
[NASA-CASE-XGS-02171] c09 N69-24324
- Microwave waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141
- MODE TRANSFORMERS**
- Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984
- Dual waveguide mode source for controlling amplitudes of two modes
[NASA-CASE-XNP-03134] c07 N71-10676
- MODULATION**
- Demodulator for carrier transducers
[NASA-CASE-HUC-10107-1] c09 N74-17930
- MODULATORS**
- Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491
- Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605
- Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
- Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-FRC-10072-1] c09 N74-14939
- Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c07 N74-30532
- MODULES**
- Biorthogonal encoder with modular design
[NASA-CASE-NPO-10629] c08 N72-18184
- MOISTURE**
- Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
- MOISTURE METERS**
- Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934
- MOLDING MATERIALS**
- Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 N71-10672
- Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-XNP-03498] c15 N71-15986
- Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975
- Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346
- Molding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c15 N74-13177
- Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c15 N74-14133
- MOLDS**
- Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836
- Using molds for fabricating individual fluid circuit components
[NASA-CASE-XLA-07829] c15 N72-16329
- Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c15 N74-14133
- Method of making an apertured casting
[NASA-CASE-LEW-11469-1] c15 N74-18131
- Molding apparatus --- for thermosetting plastic compositions
[NASA-CASE-LAR-10489-2] c15 N74-32920
- Evacuated, displacement compression mold --- of tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c31 N75-13111
- MOLECULAR BEAMS**
- Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLE-01533] c11 N71-10777
- Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c28 N74-31269
- MOLECULAR GASES**
- Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127
- MOLECULAR PUMPS**
- Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-XGS-00783] c30 N71-17788

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- Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
- MOLECULAR ROTATION**
Laser utilizing infrared rotation transitions of diatomic gas for production of different wavelengths
[NASA-CASE-ARC-10370-1] c16 N72-10432
- MOLECULAR SPECTROSCOPY**
Microwave double resonance spectroscopy absorption cell for gas analysis
[NASA-CASE-LAR-10305] c14 N71-26137
- MOLECULES**
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[NASA-CASE-GSC-11895-1] c15 N74-33997
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[NASA-CASE-XLE-01645] c03 N71-20904
- MOLYBDENUM CARBIDES**
Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077
- MOLYBDENUM COMPOUNDS**
Method for producing refractory molybdenum disilicides
[NASA-CASE-XMS-00370] c17 N71-20941
- MOMENTS OF INERTIA**
Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992
- MOMENTUM**
Utilization of momentum devices for forming attitude control and damping system for spacecraft
[NASA-CASE-XLA-02551] c21 N71-21708
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[NASA-CASE-XMS-04201] c14 N71-22990
- MONITORS**
Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175
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[NASA-CASE-KSC-10162] c09 N72-11225
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[NASA-CASE-NPO-10985] c14 N73-20478
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[NASA-CASE-HSC-14180-1] c05 N73-22045
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[NASA-CASE-KSC-10728-1] c14 N73-32319
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[NASA-CASE-GSC-11353-1] c23 N74-21304
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[NASA-CASE-XNP-04167-3] c25 N72-21693
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- MONOCHROMATORS**
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[NASA-CASE-LAR-10180-1] c06 N71-13461
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[NASA-CASE-HSC-12146-1] c07 N72-17109
- MONOMERS**
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[NASA-CASE-LEW-11879-1] c18 N74-20152
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[NASA-CASE-XLA-00414] c07 N70-38200
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[NASA-CASE-XNP-00249] c28 N70-38249
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[NASA-CASE-XNP-00876] c28 N70-41311
- MONOPULSE ANTENNAS**
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[NASA-CASE-XGS-05582] c07 N69-27460
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[NASA-CASE-XNP-01735] c07 N71-22750
Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
- MONOPULSE RADAR**
Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
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[NASA-CASE-XGS-01155] c10 N71-21483
- MONOSTABLE MULTIVIBRATORS**
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[NASA-CASE-GSC-11139] c09 N71-27016
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[NASA-CASE-HSC-13492-1] c10 N71-28860
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Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c14 N74-15091
- MOTION**
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[NASA-CASE-XPR-05421] c15 N71-22994
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[NASA-CASE-MFS-21087-1] c14 N74-17153
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[NASA-CASE-MFS-22517-1] c14 N74-33943
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[NASA-CASE-LAR-10276-1] c09 N75-15662
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[NASA-CASE-XMS-03252] c15 N71-10658
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[NASA-CASE-XAR-03786] c09 N69-21313
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[NASA-CASE-XNP-06892] c09 N71-24805
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[NASA-CASE-NPO-10158] c33 N71-16356
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[NASA-CASE-NPO-10138] c33 N71-16357
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[NASA-CASE-XMS-02184] c15 N71-20813
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- [NASA-CASE-MFS-21919-1] c10 N73-25243
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[NASA-CASE-LEW-11076-3] c15 N74-10475
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[NASA-CASE-NPO-11850-1] c09 N74-12912
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[NASA-CASE-XNP-09453] c08 N71-19420
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[NASA-CASE-XAC-06302] c08 N71-19763
Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MSC-14180-1] c05 N73-22045
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[NASA-CASE-NPO-11593-1] c07 N73-28012
Miniature multichannel biotelemetry system
[NASA-CASE-NPO-13065-1] c05 N74-26625
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[NASA-CASE-NPO-13385-1] c08 N74-32646
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[NASA-CASE-XMS-01625] c15 N71-23022
Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-MFS-14023] c33 N71-25351
Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-XMP-03968] c14 N71-27186
Procedure for making insulating foil for use in multilayer insulating system
[NASA-CASE-LEW-11484-1] c15 N73-22415
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[NASA-CASE-LEW-11484-2] c24 N75-14839
- MULTIPLE BEAM INTERVAL SCANNERS**
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[NASA-CASE-GSC-10553-1] c07 N71-19854
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[NASA-CASE-GSC-11862-1] c09 N74-32674
- MULTIPLE DOCKING ADAPTERS**
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[NASA-CASE-XMS-03613] c31 N71-16346
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[NASA-CASE-MFS-20855-1] c31 N72-25853
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Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c62 N75-12652
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Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814
Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171
Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NPO-11333] c08 N72-22162
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[NASA-CASE-GSC-11744-1] c09 N73-23291
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[NASA-CASE-GSC-11388-1] c07 N73-24187
- Television multiplexing system, using single crystal controlled clock for signal synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115
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[NASA-CASE-NPO-13321-1] c07 N74-19806
- MULTIPLIERS**
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[NASA-CASE-XER-09213] c07 N71-12390
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[NASA-CASE-XLA-02850] c09 N71-20447
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[NASA-CASE-NPO-11948-1] c10 N74-32712
- MULTISPECTRAL PHOTOGRAPHY**
Computerized optical system for producing multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661
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[NASA-CASE-MSC-14472-1] c13 N74-32780
- MULTISTAGE ROCKET VEHICLES**
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XMP-00389] c31 N70-34176
Steerable solid propellant rocket motor adapted to effect payload orientation as multistage rocket stage or reduce velocity as retrorocket
[NASA-CASE-XNP-00234] c28 N70-38645
Multi-mission space vehicle module stage design
[NASA-CASE-XMP-01543] c31 N71-17730
Separation mechanism for use between stages of multistage rocket vehicles
[NASA-CASE-XLA-00188] c15 N71-22874
Development of remotely controlled shaped charge for lateral displacement of rocket stages after separation
[NASA-CASE-XLA-04804] c31 N71-23008
Frangible connecting link suitable for rocket stage separation
[NASA-CASE-MSC-11849-1] c15 N72-22488
- MULTIVIBRATORS**
Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604
Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
[NASA-CASE-XGS-00431] c09 N70-38995
Improved semiconductor multivibrator circuit which approaches 100 percent efficiency
[NASA-CASE-XAC-00942] c10 N71-16042
Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723
One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468
- MUSCULAR FUNCTION**
Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c54 N75-17102
- MUSCULOSKELETAL SYSTEM**
Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738

N

NACELLES

- Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788
Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493

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- Magnetic heading reference
[NASA-CASE-LAR-11387-1] c06 N75-12947

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NAVIGATION INSTRUMENTS

Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N75-15019

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system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948

NEAR INFRARED RADIATION

Collimator for analyzing spatial location of
near and distant sources of radiation
[NASA-CASE-MPS-20546-2] c14 N73-30389

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Complementary regenerative transistorized switch
circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015

NETWORK SYNTHESIS

Left and right hand circular electromagnetic
polarization excitation by phase shifter and
hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595
High speed phase detector design indicating
phase relationship between two square wave
input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596

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Deuterium pass through target --- for neutron
generating
[NASA-CASE-LEW-11866-1] c11 N74-32719

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Process for producing dispersion strengthened
nickel with aluminum comprising metallic
matrices embedded with oxides or other
hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
Selective nickel deposition on irradiation
sensitive compounds
[NASA-CASE-LEW-10965-1] c15 N72-25452

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Preparation of nickel alloys for jet turbine
blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-33283
Nickel alloy series for aerospace structures
subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616
Nickel base alloy with resistance to oxidation
at high temperatures and superior
stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026
High strength nickel based alloys
[NASA-CASE-LEW-10874-1] c17 N72-22535
Diffusion welding --- heat treatment of nickel
alloys following single step vacuum welding
process
[NASA-CASE-LEW-11388-2] c15 N74-21055

NICKEL CADMIUM BATTERIES

Heat flow calorimeter --- measures output of
Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c14 N74-27859

NICKEL COATINGS

Intermetallic chromium containing nickel
aluminide for high temperature corrosion
protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414

NICKEL COMPOUNDS

Including didymium hydrate in nickel hydroxide
of positive electrode of storage batteries to
increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608

NICKEL PLATE

Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830

NIOBIUM

Organometallic compounds of niobium and tantalum
useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

NITRIDES

Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054

NITRILES

Intumescent paint containing nitrile rubber for
fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
Catalytic trimerization of aromatic nitriles and
triaryl-s-triazine ring cross-linked high
temperature resistant polymers and copolymers
made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579

NITROAMINES

Nitroaniline sulfate, intumescent paints

[NASA-CASE-ARC-10099-1] c18 N71-15469
Mercaptan terminated polymer containing sulfonic
acid salts of nitrosubstituted aromatic amines
for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147

NITROGEN

The 3-5 photocathode with nitrogen doping for
increased quantum efficiency --- using
acceptor materials
[NASA-CASE-NPO-12134-1] c33 N75-16745

NITROGEN DIOXIDE

Method for detecting pollutants --- ozone,
nitrogen dioxide, carbon dioxide
[NASA-CASE-LAR-11405-1] c35 N75-15938

NITROGEN TETROXIDE

Gas chromatographic method for determining water
in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094

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Solid propellant stabilizer containing
nitroguanidine
[NASA-CASE-NPO-12000] c27 N72-25699

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Development and characteristics of device for
applying multiple layers of noble metal to
glass substrate for protection of optical
surfaces
[NASA-CASE-LAR-10362-1] c15 N72-27486

NOISE GENERATORS

Pseudo-noise test set for communication system
evaluation
[NASA-CASE-MPS-22671-1] c14 N74-13146

NOISE METERS

Instrumentation for measurement of aircraft
noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614

NOISE REDUCTION

Upper surface, external flow, jet-augmented flap
configuration for high wing jet aircraft for
noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332
Cassegrain antenna subreflector flange for
suppressing ground noise and increasing
antenna transmitting efficiency
[NASA-CASE-XNP-00683] c09 N70-35425
Device for adding water to high velocity exhaust
jets to reduce velocity, noise, and temperature
[NASA-CASE-XNP-01813] c28 N70-41582
Variable time constant, wide frequency range
smoothing network for noise removal from pulse
chains
[NASA-CASE-XGS-01983] c10 N70-41964
Digital telemetry system apparatus to reduce
tape recorder wow and flutter noise during
playback
[NASA-CASE-XGS-01812] c07 N71-23001
Audio signal processing system for noise surge
elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
Variable frequency nuclear magnetic resonance
spectrometer providing drive signals over wide
frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
Noise elimination in coherent imaging system by
axial rotation of optical lens for spectral
distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Audio equipment for removing impulse noise from
audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
Jet aircraft exhaust nozzle for noise reduction
[NASA-CASE-LAR-10951-1] c28 N73-19819
Development of aircraft configuration for
reduction of jet aircraft noise by exhausting
engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
Method and apparatus for improving operating
efficiency and reducing low speed noise for
turbine aircraft engines
[NASA-CASE-LAR-11310-1] c28 N73-31699
Method for eliminating noise and debris of
explosive welding techniques by using complete
enclosure
[NASA-CASE-LAR-10941-2] c15 N73-32371
Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c28 N74-15453
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 [NASA-CASE-LEW-11286-1] c02 N74-27490
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 turbofan engines
 [NASA-CASE-LEW-11402-1] c28 N74-28226
 Variably positioned guide vanes for aerodynamic
 choking
 [NASA-CASE-LAR-10642-1] c28 N74-31270
 Noise suppressor --- for turbofan engine by
 incorporating annular acoustically porous
 elements in exhaust and inlet ducts
 [NASA-CASE-LAR-11141-1] c02 N74-32418
 Abating exhaust noises in jet engines
 [NASA-CASE-ARC-10712-1] c28 N74-33218
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 [NASA-CASE-LAR-11674-1] c28 N74-33220
NOISE TEMPERATURE
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 absolute temperature measuring radiometer for
 noise sources
 [NASA-CASE-ERC-11020] c14 N71-26774
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 operating performance of frequency modulation
 demodulators by eliminating click-type noise
 impulses
 [NASA-CASE-MSC-12165-1] c07 N71-33696
NONDESTRUCTIVE TESTS
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 welds
 [NASA-CASE-XNP-02588] c15 N71-18613
 Space environment simulator for testing
 spacecraft components under aerospace conditions
 [NASA-CASE-NPO-10141] c11 N71-24964
 Apparatus for semiautomatic inspection of
 microfilmed documents for density, resolution,
 size, and position
 [NASA-CASE-NFS-20240] c14 N71-26788
 Dye penetrant and technique for nondestructive
 tests of solid surfaces contacted by liquid
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 [NASA-CASE-XMP-02221] c18 N71-27170
 Method and photodetector device for locating
 abnormal voids in low density materials
 [NASA-CASE-NFS-20044] c14 N71-28993
 Holographic system for nondestructive testing
 [NASA-CASE-MFS-21704-1] c16 N73-30478
NONEQUILIBRIUM PLASMAS
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 sensor at same potential to prevent stray wall
 current collection in ionized gases
 [NASA-CASE-XLE-00690] c25 N69-39884
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 Intumescent paint containing nitrile rubber for
 fire protection
 [NASA-CASE-ARC-10196-1] c18 N73-13562
 Process for developing flame retardant
 elastomeric composition textiles for use in
 space suits
 [NASA-CASE-MSC-14331-1] c18 N73-27501
NONLINEAR FEEDBACK
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 detection for carrier tracking
 [NASA-CASE-NPO-11921-1] c07 N74-30523
 Nonlinear nonsingular feedback shift registers
 [NASA-CASE-NPO-13451-1] c08 N74-32648
NONLINEAR SYSTEMS
 Detector assembly for discriminating first
 signal with respect to presence or absence of
 second signal at time of occurrence of first
 signal
 [NASA-CASE-XMP-00701] c09 N70-40272
 Describing continuous analog to digital
 converter with parallel digital output and
 nonlinear feedback
 [NASA-CASE-XAC-04031] c08 N71-18594
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 [NASA-CASE-XLA-11189] c10 N72-20222
NOSE CONES
 Automatically deploying nozzle exit cone extension
 [NASA-CASE-XLE-01640] c31 N71-15637
 Nose cone mounted heat resistant antenna
 comprising plurality of adjacent layers of
 silica not introducing paths of high thermal
 conductivity through ablative shield
 [NASA-CASE-XMS-04312] c07 N71-22984
NOSE WHEELS
 Nose gear steering system for vehicles with main

skids to provide directional stability after
 loss of aerodynamic control
 [NASA-CASE-XLA-01804] c02 N70-34160
NOTCH TESTS
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 [NASA-CASE-MFS-20730-1] c14 N74-13131
NOZZLE DESIGN
 High thrust annular liquid propellant rocket
 engine and exhaust nozzle design
 [NASA-CASE-XLE-00078] c28 N70-33284
 Penshaped, supersonic exhaust nozzle design
 [NASA-CASE-XLE-00057] c28 N70-38711
 Telescoping-spike supersonic nozzle for turbojet
 or ramjet engines
 [NASA-CASE-XLE-00005] c28 N70-39899
 Automatically deploying nozzle exit cone extension
 [NASA-CASE-XLE-01640] c31 N71-15637
 Propellant injection assembly having
 individually removable and replaceable nozzles
 for liquid fueled rocket engines
 [NASA-CASE-XMP-00968] c28 N71-15660
 Development of collapsible nozzle extension for
 rocket engines
 [NASA-CASE-MFS-11497] c28 N71-16224
 Design and development of gas turbine combustion
 unit with nozzle guide vanes for introducing
 diluent air into combustion gases
 [NASA-CASE-XLE-103477-1] c28 N71-20330
 Prestressed rocket nozzle with ceramic inner
 rings and refractory metal outer rings
 [NASA-CASE-XNP-02888] c18 N71-21068
 Scanning nozzle plating system --- for etching
 or plating metals on substrates without masking
 [NASA-CASE-NPO-11758-1] c15 N74-23065
NOZZLE FLOW
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 vehicles by secondary injection of fluid into
 nozzle exhaust stream
 [NASA-CASE-XLA-01163] c21 N71-15582
 Constructing fluid spike nozzle to eliminate
 heat transfer and high temperature problems
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 [NASA-CASE-XGS-01143] c31 N71-15647
 Electronic recording system for spatial mass
 distribution of liquid rocket propellant
 droplets or vapors ejected from high velocity
 nozzles
 [NASA-CASE-NPO-10185] c10 N71-26339
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 vectoring of propulsive nozzle flow
 [NASA-CASE-MFS-20831] c28 N71-29153
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 [NASA-CASE-LAR-11570-1] c28 N74-28233
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 aid ignition and protect rocket chamber from
 foreign objects
 [NASA-CASE-XLA-02651] c28 N70-41967
NUCLEAR AUXILIARY POWER UNITS
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 [NASA-CASE-NPO-13114-1] c22 N73-13656
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 charged propellant particles in electrostatic
 propulsion system
 [NASA-CASE-XLE-00818] c22 N70-34248
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 oddly shaped areas from radiant and convective
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 [NASA-CASE-XNP-01310] c33 N71-28852
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 in nuclear reactors
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[NASA-CASE-XGS-01971] c15 N71-15922
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[NASA-CASE-XNP-06914] c15 N71-21489
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[NASA-CASE-XLA-00195] c02 N70-38009
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[NASA-CASE-XNS-04072] c15 N70-42017
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[NASA-CASE-GSC-11077-1] c02 N73-13008
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[NASA-CASE-LAR-11575-1] c33 N75-12195
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[NASA-CASE-XLA-00898] c02 N70-36804
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[NASA-CASE-NPO-13112-1] c11 N74-26767
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[NASA-CASE-XMS-04201] c14 N71-22990
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[NASA-CASE-XLA-00495] c14 N70-41332
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[NASA-CASE-XLA-00135] c14 N70-33322
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[NASA-CASE-GSC-11889-1] c14 N74-32887
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[NASA-CASE-LEW-11390-3] c11 N73-28128
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[NASA-CASE-XNP-04816] c06 N69-39936
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[NASA-CASE-XLE-00010] c15 N70-33382
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[NASA-CASE-XLE-03940] c18 N71-26153
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[NASA-CASE-NPO-13606-1] c35 N75-19627
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[NASA-CASE-NPO-13614-1] c35 N75-19628
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[NASA-CASE-MSC-19095-1] c37 N75-19683
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[NASA-CASE-XNP-09770] c15 N71-20440
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[NASA-CASE-XLE-06461-2] c17 N72-28535
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[NASA-CASE-LAR-10805-1] c18 N74-16246
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[NASA-CASE-LAR-10961-1] c15 N73-12496
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[NASA-CASE-HQN-10037-1] c14 N73-27376
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[NASA-CASE-LEW-11583-1] c15 N74-13199
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[NASA-CASE-XMS-10993] c15 N71-28936
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[NASA-CASE-XLA-00210] c30 N70-40309
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[NASA-CASE-XGS-02608] c07 N70-41678
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[NASA-CASE-XLA-03497] c15 N71-23052
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[NASA-CASE-NPO-10309] c15 N69-23190
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[NASA-CASE-XLE-10529] c14 N69-23191
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[NASA-CASE-XMS-06761] c05 N69-23192
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[NASA-CASE-LAR-10894-1] c18 N73-14584
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[NASA-CASE-XMF-06589] c05 N71-23159
- PATTERN RECOGNITION**
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[NASA-CASE-XLA-00203] c14 N70-34161
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[NASA-CASE-XLA-02132] c31 N71-10582
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[NASA-CASE-XLA-05369] c31 N71-15687
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[NASA-CASE-XLA-01339] c31 N71-15692
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[NASA-CASE-XLA-09881] c31 N71-16085
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[NASA-CASE-NPO-12107] c08 N71-27255
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[NASA-CASE-XLA-00934] c14 N71-22765
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[NASA-CASE-MFS-20774] c14 N73-19420
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[NASA-CASE-NPO-10862] c06 N72-22107
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[NASA-CASE-XNP-02723] c07 N70-41680
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[NASA-CASE-XMF-08665] c10 N71-19467
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[NASA-CASE-KSC-10002] c10 N71-25865
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[NASA-CASE-NPO-11282] c10 N73-16205
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[NASA-CASE-MSC-13201-1] c07 N71-28429
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[NASA-CASE-NPO-11548] c07 N73-26118
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[NASA-CASE-NPO-11129] c09 N72-33204
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[NASA-CASE-NPO-12134-1] c33 N75-16745
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[NASA-CASE-ERC-10108] c06 N72-21094
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[NASA-CASE-GSC-11163-1] c15 N73-32360
- Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NPO-11758-1] c15 N74-23065
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[NASA-CASE-MFS-14685] c31 N71-15689
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[NASA-CASE-MSC-12297] c14 N72-23457
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[NASA-CASE-NPO-11134] c09 N72-21246
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[NASA-CASE-XLA-09122] c15 N69-27505
- Control of gas flow from pressurized vessel by thermal expansion of metal plug
[NASA-CASE-NPO-10298] c12 N71-17661
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- and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766
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- Pneumatic system for cyclic control of fluid flow in pneumatic device
[NASA-CASE-XMS-04843] c03 N69-21469
- Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
- Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-XHQ-01208] c15 N70-35409
- Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
- Pneumatic foot pedal operated fluidic exercising device
[NASA-CASE-MSC-11561-1] c05 N73-32014
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[NASA-CASE-XLA-01731] c32 N71-21045
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[NASA-CASE-XMF-06515] c14 N71-23227
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[NASA-CASE-MSC-12121-1] c15 N71-27147
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[NASA-CASE-MSC-12393-1] c02 N73-26006
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[NASA-CASE-NPO-13360-1] c15 N74-20073
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[NASA-CASE-XNP-08883] c23 N71-16101
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[NASA-CASE-NPO-11239] c14 N73-12446
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[NASA-CASE-XMF-08217] c03 N71-23239
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[NASA-CASE-ARC-10101-1] c09 N71-33109
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[NASA-CASE-NPO-13231-1] c14 N74-25932
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[NASA-CASE-MFS-10506] c06 N73-30100
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- Process for interfacial polymerization of pyromellitic dianhydride and tetraamino benzene
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[NASA-CASE-XMF-08655] c06 N71-11239
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[NASA-CASE-XMF-04133] c06 N71-20717
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[NASA-CASE-NPO-10862] c06 N72-22107
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[NASA-CASE-NPO-11609-1] c06 N72-22114
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[NASA-CASE-NPO-10863-2] c06 N72-25152
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[NASA-CASE-MFS-10507] c06 N73-30101
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[NASA-CASE-MFS-11492] c06 N73-30102
- Fabrication of polyphenylquinoxaline composite articles by means of in situ polymerization of monomers
[NASA-CASE-LEW-11879-1] c18 N74-20152
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[NASA-CASE-XMF-03074] c06 N71-24740
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[NASA-CASE-XLA-08254] c14 N71-26161
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[NASA-CASE-NPO-10701] c06 N71-28620

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[NASA-CASE-XLA-01745] c33 N71-28903
- Mercaptan terminated polymer containing sulfonic acid salts of nitrosubstituted aromatic amines for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
- Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764
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[NASA-CASE-NPO-10893] c27 N73-22710
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[NASA-CASE-NPO-10998-1] c06 N73-32029
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[NASA-CASE-ARC-10592-2] c06 N74-11926
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[NASA-CASE-XLA-01262] c15 N71-21404

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[NASA-CASE-XLA-00686] c31 N70-34135
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[NASA-CASE-ARC-10098-1] c06 N71-24739
- Lightweight fire resistant plastic foam for thermal protection of reentry vehicles and aircraft structures
[NASA-CASE-ARC-10180-1] c28 N72-20767
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[NASA-CASE-ARC-10714-1] c18 N74-11366
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[NASA-CASE-ARC-10480-1] c06 N74-12814
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[NASA-CASE-MFS-20607-1] c15 N74-26989

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[NASA-CASE-NPO-10768] c06 N71-27254
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[NASA-CASE-NPO-10768-2] c06 N72-27144
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[NASA-CASE-NPO-10767-2] c06 N72-27151
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[NASA-CASE-MFS-10512] c06 N73-30099
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[NASA-CASE-MFS-10506] c06 N73-30100
- Preparation of polyurethane polymer by reacting hydroxy polyformal with organic diisocyanate
[NASA-CASE-MFS-10509] c06 N73-30103
- Chemical and elastic properties of fluorinated polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076

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- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates

[NASA-CASE-XNP-04338] c17 N71-23046
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 [NASA-CASE-XNP-03972] c15 N71-23048
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 [NASA-CASE-MPS-20044] c14 N71-28993
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 tungsten bodies from tungsten powder particles
 [NASA-CASE-XNP-04339] c17 N71-29137
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 [NASA-CASE-MSC-13648] c05 N72-27103
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 [NASA-CASE-GSC-11368-1] c09 N73-32108
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 [NASA-CASE-GSC-11367-1] c03 N74-19692
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 [NASA-CASE-XLE-00455] c28 N70-38197

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 [NASA-CASE-LRW-11531] c15 N71-14932
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 [NASA-CASE-XMP-03212] c15 N71-22721
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 [NASA-CASE-XKS-07953] c15 N71-26134
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 [NASA-CASE-XMP-05114-2] c15 N71-26148
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 including turbine pump, cooling chamber, and
 atomizer
 [NASA-CASE-NPO-10467] c23 N71-26654
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 [NASA-CASE-XLA-03661] c15 N71-33518
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 [NASA-CASE-LAR-10102-1] c05 N72-23085
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 contamination by adenosine triphosphate light
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 [NASA-CASE-GSC-10879-1] c14 N72-25413
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 [NASA-CASE-MPS-20774] c14 N73-19420
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 characterized by telescopic sleeve
 [NASA-CASE-MPS-22283-1] c15 N73-30462
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 [NASA-CASE-ARC-10468-1] c14 N73-33361
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 [NASA-CASE-MPS-23047-1] c37 N75-10459

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 [NASA-CASE-XMP-03290] c15 N71-23256

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 [NASA-CASE-GSC-10087-2] c21 N71-13958
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 [NASA-CASE-GSC-10083-1] c30 N71-16090
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 transferring humans or materials from elevated
 location
 [NASA-CASE-XKS-07814] c15 N71-27067
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 traffic control involving supersonic transports
 [NASA-CASE-GSC-10087-3] c07 N72-12080
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 transmitter and aircraft borne receiver/decoder
 [NASA-CASE-ERC-10324] c07 N72-25173
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 dust on detector surface
 [NASA-CASE-GSC-11291-1] c25 N72-33696

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 monitoring geographic movement of surface
 vehicles in metropolitan area using
 unsynchronized radio broadcasting stations
 [NASA-CASE-NPO-13217-1] c07 N73-26144
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 [NASA-CASE-MPS-20546-2] c14 N73-30389
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 [NASA-CASE-XGS-08266] c14 N69-27432
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 [NASA-CASE-XGS-05680] c14 N71-17585
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 [NASA-CASE-GSC-10087-4] c07 N73-20174

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 [NASA-CASE-XMP-01452] c15 N70-41371
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 [NASA-CASE-XLA-01808] c15 N71-20740
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 [NASA-CASE-GSC-10780-1] c14 N72-16283
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 [NASA-CASE-MPS-21362] c11 N73-20267
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 [NASA-CASE-XLA-03213] c05 N71-11207
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[NASA-CASE-MFS-21163-1] c05 N74-17853
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[NASA-CASE-XNP-05843] c03 N71-11055
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PULSE AMPLITUDE MODULATION

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[NASA-CASE-XGS-02317] c09 N71-23525
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[NASA-CASE-XNP-09759] c08 N71-24891
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[NASA-CASE-MSC-12165-1] c07 N71-33696

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High resolution radar transmitting system for transmitting optical pulses to targets
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Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
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[NASA-CASE-XNP-05429] c26 N71-21824
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[NASA-CASE-XNP-04042] c15 N71-23023
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[NASA-CASE-GSC-10218-1] c15 N72-21465
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[NASA-CASE-XNP-04389] c28 N71-20942

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[NASA-CASE-HQN-10756-1] c14 N72-25428
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High intensity heat and light unit containing quartz lamp elements protectively positioned to withstand severe environmental stress
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[NASA-CASE-LAR-10089-1] c15 N74-23066

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[NASA-CASE-MFS-21362] c11 N73-20267
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RADAR RANGE

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RADAR RECEIVERS

Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864

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Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-XNP-00748] c07 N70-36911

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[NASA-CASE-XMS-00893] c07 N70-40063

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[NASA-CASE-GSC-10553-1] c07 N71-19854
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[NASA-CASE-XGS-03501] c09 N71-20864
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[NASA-CASE-XLA-06199] c15 N71-24875

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[NASA-CASE-ARC-10802-1]

c14 N74-28933

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[NASA-CASE-XGS-05534] c23 N71-16355
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[NASA-CASE-XMS-03478] c14 N71-21040
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[NASA-CASE-XLA-00793] c21 N71-22880
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[NASA-CASE-XGS-03230] c14 N71-23401
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[NASA-CASE-ARC-10308-1] c06 N72-31141
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[NASA-CASE-NPO-12128-1] c14 N73-32317
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[NASA-CASE-XLA-04555-1] c14 N71-25892

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[NASA-CASE-GSC-11425-1] c24 N74-20329

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[NASA-CASE-NPO-11493] c14 N73-12447

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[NASA-CASE-XLE-00011] c14 N70-41946

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[NASA-CASE-XLA-02810] c14 N71-25901

Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NPO-11493] c14 N73-12447

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[NASA-CASE-MPS-20407] c09 N73-19235

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[NASA-CASE-LEW-11159-1] c14 N73-28488

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[NASA-CASE-MPS-21441-1] c14 N73-30392

Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c14 N74-26949

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[NASA-CASE-XNP-01310] c33 N71-28852

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[NASA-CASE-MPS-20180] c16 N72-12440

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[NASA-CASE-LEW-10814-1] c28 N70-35422

Describing hot filament type Bayard-Alpert ionization gage with ion collector buried or removed from grid structure
[NASA-CASE-XLA-07424] c14 N71-18482

Sealed housing for protecting electronic equipment against electromagnetic interference
[NASA-CASE-MSC-12168-1] c09 N71-18600

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[NASA-CASE-LEW-10210-1] c28 N71-26781

Light shield and cooling apparatus --- high intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c15 N74-23066

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[NASA-CASE-XNP-03934] c09 N71-22985

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[NASA-CASE-MPS-20095] c24 N72-11595

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[NASA-CASE-NPO-11686] c14 N73-25462

High powered arc electrodes --- producing solar simulator radiation
[NASA-CASE-LEW-11162-1] c09 N74-12913

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Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041

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Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979

Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607

Improving radiation resistance of silicon semiconductor junctions by doping with lithium
[NASA-CASE-XGS-07801] c09 N71-12513

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[NASA-CASE-XMS-05909-1] c14 N69-27459

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[NASA-CASE-XLE-03307] c33 N71-14035

Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641

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[NASA-CASE-XNP-02923] c28 N71-23081

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Development and characteristics of extensible dipole antenna using deformable tubular metallic strip element
[NASA-CASE-HQN-00937] c07 N71-28979

Highly efficient antenna system using a corrugated horn and scanning hyperboloid reflector
[NASA-CASE-NPO-13568-1] c33 N75-14964

RADIO ASTRONOMY
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723

RADIO CONTROL
Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202

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Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323

Automatic gain control amplifier system
[NASA-CASE-XMS-05307] c09 N69-24330

Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XNP-09422] c07 N71-19436

Development of automatic frequency discriminators and control for phase lock loop providing frequency preset capabilities
[NASA-CASE-XNP-08665] c10 N71-19467

System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops

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Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
Radio frequency source resistance measuring instruments of varied design
[NASA-CASE-NPO-11291-1] c14 N73-30388
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[NASA-CASE-LAR-11021-1] c14 N74-20019
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890
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Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma
[NASA-CASE-XER-11019] c09 N71-23598
Automatic nulling system for interference signal at multichannel receiver by polarization adjustment
[NASA-CASE-NPO-13140-1] c07 N73-27106
RADIO FREQUENCY SHIELDING
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
Process for making RF shielded cable connector assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083
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Radio receiver with array of independently steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098
RADIO RELAY SYSTEMS
Satellite radio communication system with remote steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
RADIO SIGNALS
Erectable, inflatable, radio signal reflecting passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
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System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
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Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
RADIO TRANSMITTERS
Development of radio locating system for monitoring geographic movement of surface vehicles in metropolitan area using unsynchronized radio broadcasting stations
[NASA-CASE-NPO-13217-1] c07 N73-26144
RADIO WAVES
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
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Radioactive isotope capsule container design for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c33 N71-35153
Thermally cascaded thermoelectric generator with radioisotopic heat source
[NASA-CASE-NPO-10753] c03 N72-26031
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Production of I-123 for use as radiopharmaceutical for low radiation exposure
[NASA-CASE-LEW-10518-1] c24 N72-33681

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Nondestructive radiographic tests of resistance welds
[NASA-CASE-XNP-02588] c15 N71-18613
RADIOMETERS
Miniaturized radiometer for detecting low level thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
Black body radiometer having isothermally surrounded cavity for ultraviolet, visible, and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323
Thermoelectric radiometer using polymer film as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477
Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
Development of radiometric sensor to warn aircraft pilots of region of clear air turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437
Radiometric measuring system for solar activity and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432
Steady state thermal radiometers
[NASA-CASE-MFS-21108-1] c14 N74-27861
RADIOTELEPHONES
Communication system for transmitting biomedical information obtained from patient in moving ambulance to hospital for diagnosis
[NASA-CASE-PRC-10031] c05 N70-20717
RAIN
Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334
RAMJET ENGINES
Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
RANDOM LOADS
Fatigue testing device applying random discrete load levels to test specimen and applicable to aircraft structures
[NASA-CASE-XLA-02131] c32 N70-42003
RANDOM NOISE
Circuits for amplitude limiting of random noise inputs
[NASA-CASE-NPO-10169] c10 N71-24844
Digital servo control of random sound test excitation --- in reverberant acoustic chamber
[NASA-CASE-NPO-11623-1] c23 N74-31148
Random pulse generator
[NASA-CASE-MSC-14131-1] c33 N75-19515
RANGE FINDERS
Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930
RANGEFINDING
Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
Spacecraft ranging system
[NASA-CASE-NPO-10066] c09 N71-18598
Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209
Loop transponder for regenerating code of mu-type ranging system
[NASA-CASE-NPO-11707] c07 N73-25161
Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015
RARE EARTH COMPOUNDS
Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608
RARE GASES
Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c16 N74-16187

BAREFIED GASES

Magnetically controlled plasma accelerator
capable of ignition in low density gaseous
environment
[NASA-CASE-XLA-00327] c25 N71-29184

RATES (PER TIME)

Apparatus and digital technique for coding rate
data
[NASA-CASE-LAR-10128-1] c08 N73-20217

RC CIRCUITS

RC transistor circuit to indicate each pulse of
pulse train and occurrence of nth pulse
[NASA-CASE-XMF-00906] c09 N70-41655

Device utilizing RC rate generators for
continuous slow speed measurement
[NASA-CASE-XMF-02966] c10 N71-24863

Digital data handling circuits for pulse
amplifiers
[NASA-CASE-XNP-01068] c10 N71-28739

Design of active RC network capable of operating
at high Q values with reduced sensitivity to
gain amplification and number of passive
components
[NASA-CASE-ARC-10042-2] c10 N72-11256

Active RC filter networks and amplifiers for
deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171

RC networks with voltage amplifier, RC input
circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172

Multiloop RC active filter network with low
parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245

Temperature control system comprised of
wheatstone bridge with RC circuit
[NASA-CASE-NPO-11304] c14 N73-26430

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

REACTION CONTROL

Development of voice operated controller for
controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160

REACTION WHEELS

Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082

Gravity gradient attitude control system with
gravity gradiometer and reaction wheels for
artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324

REACTIVITY

Absorbing gas reactivity control system for
minimizing power distribution and perturbation
in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597

REACTOR CORES

Simulated fuel assembly-type flow measurement
apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669

Solid state device for mapping flux and power in
nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808

Reactor heated in-core diodes for energy
conversion
[NASA-CASE-NPO-10542] c09 N72-27228

REACTOR TECHNOLOGY

Nuclear reactor control rod assembly with
improved driving mechanism
[NASA-CASE-XLE-00298] c22 N70-34501

READOUT

Flow angle sensor and remote readout system for
use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864

System for checking status of several
double-throw switches by readout indications
[NASA-CASE-XLA-08799] c10 N71-27272

REAL TIME OPERATION

Respiratory analysis system to determine gas
flow rate and frequency of respiration and
expiration cycles in real time
[NASA-CASE-HSC-13436-1] c05 N73-32015

Real time moving scene holographic camera system
[NASA-CASE-HFS-21087-1] c14 N74-17153

Real time, large volume, moving scene
holographic camera system
[NASA-CASE-HFS-22537-1] c14 N74-28932

Real time liquid crystal image converter
[NASA-CASE-LAR-11206-1] c23 N74-30118

Real time analysis of voiced sounds
[NASA-CASE-NPO-13465-1] c71 N75-13593

RECEIVERS

Semiconductor in resonant cavity for improving
signal to noise ratio of communication receiver
[NASA-CASE-HSC-12259-1] c07 N70-12616

Improved phase lock loop for receiver in
multichannel telemetry system with suppressed
carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012

Automatic carrier acquisition system for phase
locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113

Coherent receiver employing nonlinear coherence
detection for carrier tracking
[NASA-CASE-NPO-11921-1] c07 N74-30523

RECONSTRUCTION

Method and means for recording and
reconstructing holograms without use of
reference beam
[NASA-CASE-ERC-10020] c16 N71-26154

RECORDING INSTRUMENTS

Weighing and recording device for obtaining
precise automatic record of small changes in
force
[NASA-CASE-XLA-02605] c14 N71-10773

Blood pressure measuring system for separately
recording dc and ac pressure signals of
Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317

Helical recorder for multiple channel recording
[NASA-CASE-GSC-10614-1] c09 N72-11224

Thermomagnetic recording and magneto-optic
playback system having constant intensity
laser beam control
[NASA-CASE-NPO-11317-2] c16 N74-13205

Holography utilizing surface plasmon resonances
[NASA-CASE-HFS-22040-1] c14 N74-26946

Measuring probe position recorder
[NASA-CASE-LAR-10806-1] c14 N74-32877

RECOVERABILITY

Ejectable underwater sound source recovery
assembly
[NASA-CASE-LAR-10595-1] c15 N74-16135

RECOVERABLE LAUNCH VEHICLES

Techniques for recovery of multistage rocket
vehicles by providing lifting surfaces on
individual sections
[NASA-CASE-XMF-00389] c31 N70-34176

RECOVERABLE SPACECRAFT

Describing assembly for opening stabilizing and
decelerating flaps of flight capsules used in
space research
[NASA-CASE-XMF-03169] c31 N71-15675

RECOVERY PARACHUTES

Parachute system for lowering manned spacecraft
from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009

Development and operating principles of gas
generator for deploying recovery parachutes
from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898

RECTANGULAR PANELS

Rectangular solar cell stacked panels to
generate electrical power aboard spacecraft
[NASA-CASE-NPO-11771] c03 N73-20040

RECTIFIERS

Lithium drifted silicon radiation detector with
gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191

Power control switching circuit using low
voltage semiconductor controlled rectifiers
for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888

Precision full wave rectifier circuit for
rectifying incoming electrical signals having
positive or negative polarity with only
positive output signals
[NASA-CASE-ARC-10101-1] c09 N71-33109

Voltage amplitude-responsive trigger circuit
with silicon controlled rectifier
[NASA-CASE-GSC-10221-1] c09 N72-23171

Dc to ac to dc converter with transistor driven
synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253

REDUCED GRAVITY

Reduced gravity liquid configuration simulator
to study propellant behavior in rocket fuel
tanks
[NASA-CASE-XLE-02624] c12 N69-39988

REDUCTION (CHEMISTRY)

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- Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-XMS-03371] c05 N70-42000
- Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
- Development of restraint system for securing personnel to ergometer while exercising under weightless conditions
[NASA-CASE-MPS-21046-1] c14 N73-27377
- REDUCTION (CHEMISTRY)**
Producing metal powders of controlled particle size by reducing oxide using reactive metal vapor in vacuum
[NASA-CASE-XLE-06461] c17 N72-22530
- REDUNDANT COMPONENTS**
Redundant memory for enhanced reliability of digital data processing system
[NASA-CASE-GSC-10564] c10 N71-29135
- REENTRY COMMUNICATION**
Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
- Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372
- Reentry communication by injection of water droplets into plasma layer surrounding space vehicle
[NASA-CASE-XLA-01552] c07 N71-11284
- REENTRY SHIELDING**
Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
- Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834
- Radioactive isotope capsule container design for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c33 N71-35153
- Ablative heat shield for protection from aerodynamic heating of reentry spacecraft
[NASA-CASE-MSC-12143-1] c33 N72-17947
- REENTRY TRAJECTORIES**
Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities
[NASA-CASE-XMS-04142] c31 N70-41631
- REENTRY VEHICLES**
Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
- Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
- Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
- Ablation sensor for measuring surface ablation rate of material on vehicles entering earth's atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
- Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere
[NASA-CASE-XLA-04901] c31 N71-24315
- Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
- Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
- Ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c18 N74-30004
- REFERENCE SYSTEMS**
Automatic frequency control device for providing frequency reference for voltage controlled oscillator
[NASA-CASE-KSC-10393] c09 N72-21247
- REFINING**
Helium refining by superfluidity
[NASA-CASE-XNP-00733] c06 N70-34946
- REFLECTANCE**
Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365
- Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XNP-05844] c14 N71-17587
- Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
- Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
- REFLECTED WAVES**
Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
[NASA-CASE-MPS-20243] c23 N73-13662
- Clear air turbulence detector
[NASA-CASE-MPS-21244-1] c36 N75-15028
- Reflected wave maser --- low noise amplifier
[NASA-CASE-NPO-13490-1] c36 N75-16827
- REFLECTION**
Vacuum preparation of zinc titanate pigment resistant to loss of reflective properties
[NASA-CASE-MPS-13532] c18 N72-17532
- A method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector
[NASA-CASE-ARC-10631-1] c14 N74-34864
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Ellipsoidal mirror reflector for measuring reflectance
[NASA-CASE-XGS-05291] c23 N71-16341
- REFLECTORS**
Method of compactly packaging centrifugally expandable lightweight flexible reflector satellite
[NASA-CASE-XLA-00138] c31 N70-37981
- Antenna design with self erecting mesh reflector
[NASA-CASE-XGS-09190] c31 N71-16102
- Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206
- Conical reflector antenna with feed approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127
- Target acquisition antenna feed with reflector system
[NASA-CASE-GSC-10064-1] c10 N72-22235
- Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
[NASA-CASE-NPO-11264] c07 N72-25174
- Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130
- REFRACTOMETERS**
Particle size spectrometer and refractometer
[NASA-CASE-NPO-13614-1] c35 N75-19628
- REFRACTORY MATERIALS**
Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
- Method for producing refractory molybdenum disilicides
[NASA-CASE-XMS-00370] c17 N71-20941
- Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
[NASA-CASE-XNP-02888] c18 N71-21068
- Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials
[NASA-CASE-XER-08476-1] c26 N72-17820
- Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
[NASA-CASE-MPS-20710] c11 N72-23215
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579
- REFRACTORY METALS**
Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812
- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468

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RELIEF VALVES

- Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-XNP-04338] c17 N71-23046
- Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals
[NASA-CASE-XNP-03063] c17 N71-23365
- Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace
[NASA-CASE-XLE-03432] c33 N71-24145
- Production of high strength refractory compounds and microconstituents into refractory metal matrix
[NASA-CASE-XLE-03940] c18 N71-26153
- Silicide coating process and composition for protection of refractory metals from oxidation
[NASA-CASE-XLE-10910] c18 N71-29040
- Development of procedure for improved distribution of refractory compounds and micro-constituents in refractory metal matrix
[NASA-CASE-XLE-03940-2] c17 N72-28536
- Improved silicide coatings for refractory metals employed in space shuttles and gas turbine engine components
[NASA-CASE-LEW-11179-1] c17 N73-22474
- Method of making an apertured casting
[NASA-CASE-LEW-11169-1] c15 N74-18131
- REFRIGERATING**
Heat exchanger and decontamination system for multistage refrigeration unit
[NASA-CASE-NPO-10634] c23 N72-25619
- REFRIGERATING MACHINERY**
Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NPO-10309] c15 N69-23190
- Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
- Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
- REFRIGERATORS**
Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906
- An improved helium refrigerator
[NASA-CASE-NPO-13435-1] c23 N74-28134
- REGENERATION (ENGINEERING)**
Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032
- Direct current electromotive system for regenerative braking of electric motor
[NASA-CASE-XNP-01096] c10 N71-16030
- REGENERATIVE COOLING**
Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
- Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction
[NASA-CASE-XLE-00150] c28 N70-41818
- Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992
- Regenerative cooling system for rocket combustion chamber using coolant tubes in convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-23968
- Thermocouple apparatus for measuring wall temperatures in regeneratively cooled rocket engines having thin walled cooling passages
[NASA-CASE-XLE-05230-2] c14 N73-13417
- REGENERATIVE FUEL CELLS**
Electrolytically regenerative hydrogen-oxygen fuel cells
[NASA-CASE-XLE-04526] c03 N71-11052
- REGENERATORS**
Loop transponder for regenerating code of mu-type ranging system
- [NASA-CASE-NPO-11707] c07 N73-25161
- REGISTERS (COMPUTERS)**
Data processor with plural register stages for selectively interconnecting with each other to effect multiplicity of operations
[NASA-CASE-GSC-10786] c08 N71-33110
- REINFORCED PLASTICS**
Process for developing filament reinforced plastic tubes used in research and development programs
[NASA-CASE-LAR-10203-1] c15 N72-16330
- Reinforced structural plastics
[NASA-CASE-LEW-10199-1] c18 N74-23125
- REINFORCEMENT (STRUCTURES)**
Reinforcing beam system for highly flexible diaphragms in valves or pressure switches
[NASA-CASE-XNP-01962] c32 N70-41370
- Fabrication of light weight panel structure using pairs of elongate hollow ribs of semicircular configuration
[NASA-CASE-LAR-11052-1] c32 N73-13929
- REINFORCING FIBERS**
High strength reinforced metallic composites for applications over wide temperature range
[NASA-CASE-XLE-02428] c17 N70-33288
- Method for producing fiber reinforced metallic composites with high strength and elasticity over wide temperature range
[NASA-CASE-XLE-00231] c17 N70-38198
- Description of method for producing metallic composites reinforced with ceramic and refractory hard metals that are fibered in place
[NASA-CASE-XLE-03925] c18 N71-22894
- Production and application of sprayable fiber reinforced ablation material
[NASA-CASE-XLA-04251] c18 N71-26100
- RELAXATION OSCILLATORS**
Voltage controlled, variable frequency relaxation oscillator with MOSFET variable current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882
- RELAY SATELLITES**
Earth satellite relay station for frequency multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621
- RELEASING**
Bolt-latch mechanism for releasing despin weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
- Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
- Design and development of release mechanism for spacecraft components, releasable despin weights, and extensible gravity booms
[NASA-CASE-XGS-08718] c15 N71-24600
- Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
- Delayed simultaneous appendage release mechanism for use on spacecraft equipped with despin mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039
- RELIABILITY ANALYSIS**
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[NASA-CASE-NPO-13086-1] c15 N73-12495
- RELIABILITY ENGINEERING**
Improving load capacity and fatigue life of rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
- Gage for quality control of sealing surfaces of threaded boss
[NASA-CASE-XMP-04966] c14 N71-17658
- Reliability of automatic refilling valving device for cryogenic liquid systems
[NASA-CASE-NPO-11177] c15 N72-17453
- Reliability of electrical connectors after heat sterilization
[NASA-CASE-NPO-10694] c09 N72-20200
- Reliable electrical element heater using plural wire system and backup power sources
[NASA-CASE-MPS-21462-1] c09 N74-14935
- Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c15 N74-21064
- RELIEF VALVES**
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rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924

Describing apparatus for separating gas from
cryogenic liquid under zero gravity and for
venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968

Redundant hydraulic control system for actuators
with three main valve combination
[NASA-CASE-MFS-20944] c15 N73-13466

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Oscillatory electromagnetic mirror drive system
for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461

Stage separation using remote control release of
joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490

Power controlled bimetallic electromechanical
actuator for accurate, timely, and reliable
response to remote control signal
[NASA-CASE-XNP-09776] c09 N69-39929

Controlled caging and uncaging mechanism for
remote instrument control
[NASA-CASE-GSC-11063-1] c03 N70-35584

Two component valve assembly for cryogenic
liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492

Remotely actuated quick disconnect mechanism for
umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258

Remotely actuated quick disconnect for tubular
umbilical conduits used to transfer fluids
from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259

Remote control device operated by movement of
finger tips for manual control of spacecraft
attitude
[NASA-CASE-XAC-02405] c09 N71-16089

Satellite radio communication system with remote
steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900

Laser beam projector for continuous, precise
alignment between target, laser generator, and
astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125

Solid state remote circuit selector switching
circuit
[NASA-CASE-LEW-10387] c09 N72-22201

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remote control system using modulated
helium-neon laser as transmitter and light
collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536

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[NASA-CASE-MFS-22022-1] c05 N74-10099

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environment
[NASA-CASE-MFS-14405] c15 N72-28495

Apparatus for remote handling of materials ---
mixing or analyzing dangerous chemicals
[NASA-CASE-LAR-10634-1] c15 N74-18123

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detection system
[NASA-CASE-XMP-14032] c20 N71-16340

Ionization control system design for monitoring
separately located ion gage pressures on
vacuum chambers
[NASA-CASE-XLE-00787] c14 N71-21090

Flow angle sensor and remote readout system for
use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864

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using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326

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aircraft pilots of region of clear air
turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437

Development of electronic detection system for
remotely determining number and movement of
enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160

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level of transmitted power is controlled by
reflections from receiver
[NASA-CASE-MFS-21470-1] c10 N74-19870

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[NASA-CASE-NPO-13462-1] c35 N75-16807

Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521

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[NASA-CASE-XPR-00811] c15 N70-36901

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sync pulse for activating binary counter to
produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773

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for lunar exploration and convertible to
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[NASA-CASE-LAR-10056] c05 N71-12351

Development and characteristics of rescue litter
with inflatable flotation device for water
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[NASA-CASE-XMS-04170] c05 N71-22748

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plastic tubes used in research and development
programs
[NASA-CASE-LAR-10203-1] c15 N72-16330

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[NASA-CASE-XPR-00929] c31 N70-34966

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research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895

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stress transducer design with bonded
semiconductive piezoresistive element for
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[NASA-CASE-XNP-02983] c14 N71-21091

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[NASA-CASE-MSC-90153-2] c05 N72-25120

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for determining viscoelastic properties of
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thermal protective sleeves to magnesium alloy
conical shell components with different
thermal coefficients
[NASA-CASE-XLA-01262] c15 N71-21404

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cover glass
[NASA-CASE-LEW-11065-2] c03 N73-26048

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[NASA-CASE-ARC-10098-1] c06 N71-24739

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in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489

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[NASA-CASE-ERC-10339-1] c18 N73-30532

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[NASA-CASE-MSC-90153-2] c05 N72-25120

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lubrication device --- using oil-saturated
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[NASA-CASE-XLE-01783] c28 N70-34175

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[NASA-CASE-NPO-13081-1] c07 N74-22814

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[NASA-CASE-XAC-00404] c08 N70-40125
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[NASA-CASE-XGS-08269] c23 N71-26206

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[NASA-CASE-MS-C-14066-1] c10 N74-27705

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[NASA-CASE-XPR-08403] c05 N71-11202

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[NASA-CASE-PRC-10012] c14 N72-17329

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[NASA-CASE-PRC-10022] c12 N71-26546
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Metabolic analyzer --- for measuring metabolic rate and breathing dynamics of human beings
[NASA-CASE-MFS-21415-1] c05 N74-20728

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[NASA-CASE-XGS-05715] c23 N71-16100
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[NASA-CASE-GSC-11188-1] c14 N73-32320
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[NASA-CASE-XLA-05966] c15 N72-12408
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[NASA-CASE-XLE-00409] c28 N71-15658
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[NASA-CASE-LEW-11076-3] c15 N74-10475
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Aircraft control system for rotary wing aircraft
[NASA-CASE-ERC-10439] c02 N73-19004
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Variable geometry rotor system for direct
control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c02 N74-34475
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Optical scanner mounted on rotating support
structure with method of compensating for
image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
Laser device for removing material from rotating
object for dynamic balancing
[NASA-CASE-MFS-11279] c16 N71-20400
Development and characteristics of annular
momentum control device for two axis
stabilization of spacecraft
[NASA-CASE-LAR-11051-1] c21 N73-28646
Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c15 N74-18132
Phase-locked servo system --- for synchronizing
the rotation of slip ring assembly
[NASA-CASE-MFS-22073-1] c33 N75-13139
ROTATING DISKS
Foil seal between parts moving relative to each
other
[NASA-CASE-XLE-05130] c15 N69-21362
Rocket-borne aspect sensor consisting of
radiation sensor, apertured disk, commutator,

ROTATING ELECTRICAL MACHINES

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and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432

ROTATING ELECTRICAL MACHINES

Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479

Design and development of electric motor with stationary field and armature windings which operates on direct current
[NASA-CASE-XGS-05290] c09 N71-25999

Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364

ROTATING ENVIRONMENTS

Radial module manned space station with artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373

Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776

Rotary plant growth accelerating apparatus --- for weightlessness simulation
[NASA-CASE-ARC-10722-1] c04 N74-13807

ROTATING GENERATORS

Rotating raster generator
[NASA-CASE-PRC-10071-1] c07 N74-20813

ROTATING MIRRORS

Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605

Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880

Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674

Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c23 N74-21304

ROTATING SHAFTS

Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XLE-05130-2] c15 N71-19570

Anemometer with braking mechanism to prevent rotation of wind driven elements
[NASA-CASE-XMP-05224] c14 N71-23726

Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XNP-06936] c15 N71-24695

Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294

Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136

Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255

Development of optical system for detecting defective components in rotating machinery with emphasis on bearing assemblies
[NASA-CASE-KSC-10752-1] c15 N73-27407

High speed, self-acting shaft seal
[NASA-CASE-LEW-11274-1] c15 N73-29457

Spiral groove seal --- for rotating shaft
[NASA-CASE-XLE-10326-4] c15 N74-15125

Digital servo controller --- for rotating antenna shaft
[NASA-CASE-KSC-10769-1] c09 N74-29556

Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c33 N74-33379

Ergometer calibrator --- for any ergometer utilizing rotating shaft
[NASA-CASE-MPS-21045-1] c35 N75-15932

Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N75-18576

ROTATION

Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982

Mechanical actuator wherein linear motion changes to rotational motion

[NASA-CASE-XGS-04548] c15 N71-24045

Positioning mechanism for converting translatory motion into rotary motion
[NASA-CASE-NPO-10679] c15 N72-21462

ROTOR BLADES (TURBOMACHINERY)

Locking device for retaining turbine rotor blades on turbine wheel
[NASA-CASE-INP-00816] c28 N71-28928

Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154

Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c15 N74-11300

Supersonic fan bladeing --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c28 N74-28226

ROTOR SPEED

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MPS-20385] c09 N71-24904

ROTORS

Multistage, multiple reentry, single rotor, axial flow turbine
[NASA-CASE-XLE-00085] c28 N70-39895

Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585

Microwave waveguide switch with rotor position control
[NASA-CASE-INP-06507] c09 N71-23548

Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XNP-06936] c15 N71-24695

Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420

Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515

Brushless dc motor with wound rotor
[NASA-CASE-NPO-13437-1] c09 N74-27688

RUBBER

Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NPO-11433] c18 N71-31140

RUBBER COATINGS

Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562

RUBY

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992

RUBY LASERS

Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MPS-20180] c16 N72-12440

RUNWAY ALIGNMENT

Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619

RUNWAY LIGHTS

Retractable runway lights
[NASA-CASE-XLA-00119] c11 N70-33329

RUPTURING

Knife structure for controlling rupture of shock tube diaphragms
[NASA-CASE-XAC-00731] c11 N71-15960

S

SAFETY DEVICES

Helmet and torso tiedown mechanism for shortening pressure suits upon inflation
[NASA-CASE-XMS-00784] c05 N71-12335

Positive locking check valve for stopping reversed flow
[NASA-CASE-XMS-09310] c15 N71-22706

Description of protective device for providing safe operating conditions around work piece in machine or metal working tool
[NASA-CASE-XLE-01092] c15 N71-22797

Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895

Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375

- Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119
- Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N74-18805
- Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c15 N74-21057
- Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c02 N74-30421
- SALT BATHS**
Application techniques for protecting materials during salt bath brazing
[NASA-CASE-XLE-00046] c15 N70-33311
- SAMARIUM**
Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLE-10715] c26 N71-23292
- SAMPLERS**
Portable vacuum probe surface sampler for sampling large surface areas with relatively light loading densities of microorganisms
[NASA-CASE-LAR-10623-1] c14 N73-30395
- Automatic biowaste sampling
[NASA-CASE-MSC-14640-1] c54 N75-13536
- SAMPLING**
Impact bit for cutting, collecting, and storing samples such as lunar rock cuttings
[NASA-CASE-XNP-01412] c15 N70-42034
- Design and development of fluid sample collector
[NASA-CASE-XMS-06767-1] c14 N71-20435
- Design and development of two types of atmosphere sampling chambers
[NASA-CASE-MPO-11373] c13 N72-25323
- Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c08 N73-32081
- Rock sampling --- apparatus for controlling particle size
[NASA-CASE-XNP-10007-1] c15 N74-23068
- Rock sampling --- method for controlling particle size distribution
[NASA-CASE-XNP-09755] c15 N74-23069
- Apparatus for microbiological sampling --- including automatic swabbing
[NASA-CASE-LAR-11069-1] c35 N75-12272
- SANDWICH STRUCTURES**
Sandwich panel structure for removing heat from shield between hot and cold areas
[NASA-CASE-XLA-00349] c33 N70-37979
- Particle detector for measuring micrometeoroid velocity in space
[NASA-CASE-XLA-00495] c14 N70-41332
- Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797
- Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
- Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811
- SAPPHIRE**
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-2] c15 N74-34002
- Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
- SATELLITE ANTENNAS**
Monopole antenna system for maximum omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200
- Development of antenna system for spin stabilized communication satellite for simultaneous reception and transmission of data
[NASA-CASE-XGS-02607] c31 N71-23009
- SATELLITE ATTITUDE CONTROL**
Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089
- Attitude control system for spacecraft based on conversion of incident solar radiation on movable control surfaces into mechanical torques
[NASA-CASE-XNP-02982] c31 N70-41855
- Design and development of satellite despinn device
[NASA-CASE-XNP-08523] c31 N71-20396
- Utilization of momentum devices for forming attitude control and damping system for spacecraft
[NASA-CASE-XLA-02551] c21 N71-21708
- Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324
- Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion
[NASA-CASE-HQN-10439] c21 N72-21624
- Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-MPO-11481] c21 N73-13644
- An attitude control system
[NASA-CASE-MFS-22787-1] c21 N74-35096
- SATELLITE CONTROL**
Stabilization system for gravity-oriented satellites using single damper rod
[NASA-CASE-XAC-01591] c31 N71-17729
- SATELLITE DESIGN**
Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081
- SATELLITE INSTRUMENTS**
Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082
- Economical satellite aided vehicle avoidance system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631
- SATELLITE NETWORKS**
Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
- SATELLITE ORBITS**
Development of method and apparatus for spinning satellite about selected axis after reaching predetermined orientation
[NASA-CASE-HQN-00936] c31 N71-29050
- SATELLITE ORIENTATION**
Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
- Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-XGS-05579] c31 N71-15676
- Development of method and apparatus for spinning satellite about selected axis after reaching predetermined orientation
[NASA-CASE-HQN-00936] c31 N71-29050
- Analog spatial maneuver computer with three output angles for obtaining desired spatial attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172
- SATELLITE PERTURBATION**
Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XNP-00442] c31 N71-10747
- SATELLITE ROTATION**
Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
- Stretch Yo-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016
- Development of method and apparatus for spinning satellite about selected axis after reaching predetermined orientation
[NASA-CASE-HQN-00936] c31 N71-29050
- SATELLITE TELEVISION**
Adaptive signal generating system and logic circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374
- SATELLITE TRACKING**
Design and development of tracking receiver for tracking satellites and receiving radio signal transmissions under adverse noise conditions
[NASA-CASE-XGS-08679] c10 N71-21473

SATELLITE TRANSMISSION

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- Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c32 N75-15854
- SATELLITE TRANSMISSION**
Asynchronous, multiplexing, single line transmission and recovery data system --- for satellite use
[NASA-CASE-NPO-13321-1] c07 N74-19806
- SATELLITE-BORNE PHOTOGRAPHY**
Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly --- for use with cameras mounted in satellites
[NASA-CASE-GSC-11560-1] c09 N74-20861
- SATURATION**
Saturable magnetic core and signal detection for indicating impending saturation
[NASA-CASE-ERC-10089] c23 N72-17747
- SAWTOOTH WAVEFORMS**
Linear sawtooth voltage wave generator with transistor timing circuit having capacitor and zener diode feedback loops
[NASA-CASE-XMS-01315] c09 N70-41675
- SCANNERS**
Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980
Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082
Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
High speed scanner for measuring mass of preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
Scan oscilloscope for mapping surface sensitivity of photomultiplier tube
[NASA-CASE-LAR-10320-1] c09 N72-23172
Ultrasonic scanner for radial and flat panels
[NASA-CASE-NFS-20335-1] c14 N74-10415
Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c14 N74-20009
Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAR-11428-1] c14 N74-34857
- SCANNING**
Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
Operation of vidicon tube for scanning spatial charge density pattern
[NASA-CASE-XNP-06028] c09 N71-23189
Electro-optical system for scanning variable transmittance objects
[NASA-CASE-NPO-11106-2] c23 N72-28696
Electronic optical transfer function analyzer using scanning image dissection system to produce representative output signal
[NASA-CASE-NFS-21672-1] c23 N73-22630
Position determination systems --- using orbital antenna scan of celestial body
[NASA-CASE-NSC-12593-1] c09 N74-14942
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Silent alarm system for multiple room facility or school
[NASA-CASE-NPO-11307-1] c10 N73-30205
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High voltage, high current Schottky barrier solar cell
[NASA-CASE-NPO-13482-1] c03 N74-30448
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[NASA-CASE-NPO-13390-1] c16 N74-32937
- SCOOPS**
Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981
- SCREWS**
Electromechanical control actuator system using double differential screws
[NASA-CASE-ERC-10022] c15 N71-26635
- Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484
- SCRUBBERS**
Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-NFS-12806] c14 N71-17588
- SEA ICE**
Laser technique for breaking ice in ship path
[NASA-CASE-LAR-10815-1] c16 N72-22520
- SEALERS**
Design and development of flexible joint for pressure suits
[NASA-CASE-XMS-09636] c05 N71-12344
Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
Leak resistant bonded elastomeric seal for secondary electrochemical cells
[NASA-CASE-XGS-02631] c03 N71-23006
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Polyimides of ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-NFS-22355] c06 N74-29480
- SEALING**
Foil seal between parts moving relative to each other
[NASA-CASE-XLE-05130] c15 N69-21362
Sealed electric storage battery with gas manifold interconnecting each cell
[NASA-CASE-XNP-03378] c03 N71-11051
Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-XNP-03290] c15 N71-23256
Segmented sealing surface in valve seat
[NASA-CASE-NPO-10606] c15 N72-25451
- SEALS (STOPPERS)**
Spacecraft battery seals
[NASA-CASE-XGS-03864] c15 N69-24320
Flexible inflatable seal for butterfly valves
[NASA-CASE-XLE-00101] c15 N70-33376
Shrink-fit vacuum system gas valve
[NASA-CASE-XGS-00587] c15 N70-35087
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[NASA-CASE-XLE-04677] c15 N71-10577
Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XLE-05130-2] c15 N71-19570
Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-NFS-20075] c09 N71-26133
Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
High speed, self-acting shaft seal
[NASA-CASE-LEW-11274-1] c15 N73-29457
Spiral groove seal --- for rotating shaft
[NASA-CASE-XLE-10326-4] c15 N74-15125
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c15 N74-21063
- SEAMS (JOINTS)**
Sealing apparatus for joining two pieces of frangible materials
[NASA-CASE-XLA-01494] c15 N71-24164
Cord restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623
Method of making pressure tight seal for super alloy
[NASA-CASE-LAR-10170-1] c15 N74-11301
- SEAT BELTS**
Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N74-18805

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Journal Bearings
[NASA-CASE-LEW-11076-2] c15 N74-32921

SEGMENTS

Fabrication of curved reflector segments for
solar mirror
[NASA-CASE-XLE-08917] c15 N71-15597

SEISMIC WAVES

Determining sway of buildings by low frequency
device using pendulum
[NASA-CASE-XMF-00479] c14 N70-34794

SELECTORS

Selector mechanism for mechanical separation and
discrimination of high velocity molecular
particles
[NASA-CASE-XLE-01533] c11 N71-10777
Peak polarity selector for monitoring waveforms
[NASA-CASE-FRC-10010] c10 N71-24862

SELF ALIGNMENT

Electro-optical system for maintaining two-axis
alignment during milling operations on large
tank-sections
[NASA-CASE-XMF-00908] c14 N70-40238

SELF ERECTING DEVICES

Self-erectable space structures of flexible foam
for application in planetary orbits
[NASA-CASE-XLA-00686] c31 N70-34135
Manned space station collapsible for launching
and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
Manned space station launched in packaged
condition and self erecting in orbit
[NASA-CASE-XLA-00258] c31 N70-38676
Foldable conduit capable of springing back as
self erecting structural member
[NASA-CASE-XLE-00620] c32 N70-41579
Antenna design with self erecting mesh reflector
[NASA-CASE-XGS-09190] c31 N71-16102
Self erecting parabolic reflector design for use
in space
[NASA-CASE-XMS-03454] c09 N71-20658

SELF LUBRICATING MATERIALS

Self lubricating fluoride-metal composite
materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Self lubricating gears and other mechanical
parts having surface adapted to frictional
contact
[NASA-CASE-MFS-14971] c15 N71-24984

SELF LUBRICATION

A self-lubricating bearing
[NASA-CASE-MFS-23009-1] c37 N75-12328

SELF MANEUVERING UNITS

Hand-held maneuvering unit for propulsion and
attitude control of astronauts in zero or
reduced gravity environment
[NASA-CASE-XMS-05304] c05 N71-12336
Lightweight propulsion unit for movement of
personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585

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Self-generating optical frequency waveguide
[NASA-CASE-HQN-10541-1] c07 N71-26291

SELF SEALING

Modification of one man life raft
[NASA-CASE-LAR-10241-1] c05 N74-14845

SEMICONDUCTOR DEVICES

Fixture for simultaneously supporting several
components for electrical testing
[NASA-CASE-XNP-06032] c09 N69-21926
Semiconductor p-n junction on needle apex to
provide stress and strain sensor
[NASA-CASE-XLA-04980] c09 N69-27422
Selective gold diffusion on monolithic silicon
chips for switching and nonswitching amplifier
devices and circuits and linear and digital
logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
Extra-long monostable multivibrator employing
bistable semiconductor switch to allow
charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
Method of forming thin window drifted silicon
charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560
Doping silicon material with gadolinium to
increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607

Separation of semiconductor wafer into chips
bounded by scribe lines

[NASA-CASE-ERC-10138] c26 N71-14354
Voltage tunable Gunn effect semiconductor for
microwave generation
[NASA-CASE-XER-07894] c09 N71-18721
Indicator device for monitoring charge of wet
cell battery, using semiconductor light
emitter and photodetector
[NASA-CASE-NPO-10194] c03 N71-20407
Signaling summary alarm circuit with
semiconductor switch for faulty contact
indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
Method for temperature compensating
semiconductor gages by exposure to high energy
radiation
[NASA-CASE-XLA-04555-1] c14 N71-25892
Development and characteristics of fluid
oscillator analog to digital converter with
variable frequency controlled by signal
passing through conditioning circuit
[NASA-CASE-LEW-10345-1] c10 N71-25899
Volume displacement transducer for leak
detection in hermetically sealed semiconductor
devices
[NASA-CASE-ERC-10033] c14 N71-26672
Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126
Test chambers with orifice and helium mass
spectrometer for detecting leak rate of
encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
Semiconductor device manufacture using
refractory dielectrics as diffusant masks and
interconnection insulating materials
[NASA-CASE-XER-08476-1] c26 N72-17820
Single crystal film semiconductor devices
[NASA-CASE-ERC-10222] c09 N72-22199
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layer between two electrical conductor or
semiconductor materials
[NASA-CASE-LEW-10489-1] c15 N72-25447
Multiterminal Gunn-type semiconductor microwave
generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679
Miniature piezoelectric semiconductor transducer
with in situ stress coupling
[NASA-CASE-ERC-10087-2] c14 N72-31446
Development and characteristics of hermetically
sealed coaxial package for containing
microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c09 N74-33740
Method and apparatus for measurement of trap
density and energy distribution in dielectric
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[NASA-CASE-NPO-13443-1] c35 N75-11307

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surface deposition of cuprous iodide on thin
n-type polycrystalline layers and heating in
iodine vapor
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Miniature electromechanical junction transducer
operating on piezoelectric effect and
utilizing epoxy for stress coupling component
[NASA-CASE-ERC-10087] c14 N71-27334
Resin for protecting p-n semiconductor junction
surface
[NASA-CASE-ERC-10339-1] c18 N73-30532

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in vacuum utilizing thermal gradient
[NASA-CASE-XKS-04614] c15 N69-21460
Semiconductor in resonant cavity for improving
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[NASA-CASE-MSC-12259-1] c07 N70-12616
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which approaches 100 percent efficiency
[NASA-CASE-XAC-00942] c10 N71-16042
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brushes for electrical energy transfer
[NASA-CASE-XMF-01016] c26 N71-17818
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SENSITIVITY
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Improved bonding method in the manufacture of continuous regression rate sensor devices [NASA-CASE-LAR-10337-1] c15 N74-14141

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Prosthetic limb with tactile sensing device [NASA-CASE-MFS-16570-1] c05 N73-32013

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Separation cell with permeable membranes for fluid mixture component separation [NASA-CASE-XMS-02952] c18 N71-20742

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Condenser-separator for dehumidifying air utilizing sintered metal surface [NASA-CASE-XLA-08645] c15 N69-21465

Umbilical separator for rockets [NASA-CASE-XNP-00425] c11 N70-38202

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Liquid-gaseous centrifugal separator for weightlessness environment [NASA-CASE-XLA-00415] c15 N71-16079

Development of liquid separating system using capillary device connected to flexible bladder storage chamber [NASA-CASE-XMS-13052] c14 N71-20427

Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer [NASA-CASE-XMF-04042] c15 N71-23023

Device for removing air from water for use in life support systems in manned space flight [NASA-CASE-XLA-8914] c15 N73-12492

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Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage [NASA-CASE-XGS-04224] c10 N71-26418

Digital function generator for generating any arbitrary single valued function [NASA-CASE-NPO-11104] c08 N72-22165

MOD 2 sequential function generator for multibit sequence, with two-bit shift register for each pair of bits [NASA-CASE-NPO-10636] c08 N72-25210

Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences [NASA-CASE-NPO-11406] c08 N73-12175

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The dc-to-dc converters employing staggered phase power switches with two loop control [NASA-CASE-NPO-13512-1] c33 N75-15876

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Service life of electromechanical device for generating sine/cosine functions [NASA-CASE-LAR-10503-1] c09 N72-21248

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Pneumatic servoamplifier for controlling flow regulation [NASA-CASE-MSC-12121-1] c15 N71-27147

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Electronic and mechanical scanning control system for monopulse tracking antenna [NASA-CASE-XGS-05582] c07 N69-27460

Proportional controller for regulating aircraft or spacecraft motion about three axes [NASA-CASE-XAC-03392] c03 N70-41954

Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders [NASA-CASE-XMS-04300] c09 N71-19479

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Servo-controlled intravitral microscope system [NASA-CASE-NPO-13214-1] c14 N74-19093

Digital servo controller --- for rotating antenna shaft [NASA-CASE-KSC-10769-1] c09 N74-29556

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Servo system for retroreflector of Michelson interferometer [NASA-CASE-NPO-10300] c14 N71-17662

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Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels [NASA-CASE-NPO-10680] c31 N73-14855

SERVOMOTORS
Automatic closed circuit television arc guidance control for welding joints [NASA-CASE-MFS-13046] c07 N71-19433

Electric motor control system with pulse width modulation for providing automatic null seeking servo [NASA-CASE-XMF-05195] c10 N71-24861

Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses [NASA-CASE-NPO-10758] c14 N73-14427

Development and characteristics of rotary actuator for use on spacecraft to deploy and

- support pivotal structures such as solar panels
[NASA-CASE-NPO-10680] c31 N73-14855
- Servo valve
[NASA-CASE-LAR-11643-1] c37 N75-13268
- SEWAGE**
Raw water sewage treatment
[NASA-CASE-NPO-13224-1] c05 N73-31011
Raw liquid waste treatment system and process
[NASA-CASE-NPO-13573-1] c05 N74-32552
- SHAFTS (MACHINE ELEMENTS)**
Fatigue resistant shear pin with hollow shaft
and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
Elastic universal joint for rocket motor mounting
[NASA-CASE-XNP-00416] c15 N70-36947
Air brake device for absorbing and measuring
power from rotating shafts
[NASA-CASE-XLE-00720] c14 N70-40201
Two axis flight controller with potentiometer
control shafts directly coupled to rotatable
ball members
[NASA-CASE-XPR-04104] c03 N70-42073
Ratchet mechanism for high speed operation at
reduced backlash
[NASA-CASE-MPS-12805] c15 N71-17805
Universal joints for connecting two displaced
shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467
Development of mating flat surfaces to inhibit
leakage of fluid around shafts
[NASA-CASE-XLE-10326-2] c15 N72-29488
Fatigue life of hybrid antifriction bearings at
ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
Spiral groove seal --- for hydraulic rotating
shaft
[NASA-CASE-LEW-10326-3] c15 N74-10474
Journal bearings
[NASA-CASE-LEW-11076-4] c15 N74-18134
Preload torque limiting shaft coupling
[NASA-CASE-LAR-11398-1] c37 N75-15994
- SHAPED CHARGES**
Coupling device for linear shaped charge for
space vehicle abort system
[NASA-CASE-XLA-00189] c33 N70-36846
Development of remotely controlled shaped charge
for lateral displacement of rocket stages
after separation
[NASA-CASE-XLA-04804] c31 N71-23008
- SHAPERS**
Mandrel for shaping solid propellant rocket fuel
into engine casing
[NASA-CASE-XLA-00304] c27 N70-34783
Hand tool for forming dimples and nipples on end
portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536
Dielectric apparatus for heating, fusing, and
hardening of organic matrix to form plastic
material into shaped product
[NASA-CASE-LAR-10121-1] c15 N71-26721
- SHARKS**
Conditioning tanned sharkskin for use as
abrasive resistant clothing
[NASA-CASE-XMS-09691-1] c18 N71-15545
- SHEAR CREEP**
Measuring shear-creep compliance of solid and
liquid materials used in spacecraft components
[NASA-CASE-XLE-01481] c14 N71-10781
- SHEAR FLOW**
Shear modulated fluid amplifier of high pressure
hydraulic vortex amplifier type
[NASA-CASE-MPS-10412] c12 N71-17578
- SHEAR PROPERTIES**
Describing instrument capable of measuring true
shear viscosity of liquids and viscoelastic
materials
[NASA-CASE-XNP-09462] c14 N71-17584
- SHEAR STRESS**
Fatigue resistant shear pin with hollow shaft
and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
Development of combined velocimeter and
accelerometer based on color changes in liquid
crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410
Bonded joint and method --- for reducing peak
shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c15 N74-23064
- SHELLS (STRUCTURAL FORMS)**
Channel-type shell construction for rocket
engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860
- SHIELDING**
Flexible bellows joint shielding sleeve for
propellant transfer pipelines
[NASA-CASE-XNP-01855] c15 N71-28937
Shielded flat conductor cable of ribbonlike
wires laminates in thin flexible insulation
[NASA-CASE-MPS-13687-2] c09 N72-22198
- SHIFT REGISTERS**
Binary to binary-coded decimal converter using
single set of logic circuits notwithstanding
number of shift register decades
[NASA-CASE-XNP-00432] c08 N70-35423
Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503
Computer circuit performing both counting and
shifting logic operations also capable of
miniaturization and integration in basic
circuits
[NASA-CASE-XNP-01753] c08 N71-22897
Commutator for steering precisely controlled
bidirectional currents through numerous loads
by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199
Multistage feedback shift register with states
decomposable into cycles of equal length
[NASA-CASE-NPO-11082] c08 N72-22167
MOD 2 sequential function generator for multibit
sequence, with two-bit shift register for each
pair of bits
[NASA-CASE-NPO-10636] c08 N72-25210
Linear shift register with feedback logic for
generating pseudonoise linear recurring binary
sequences
[NASA-CASE-NPO-11406] c08 N73-12175
Family of m-ary linear feedback shift register
with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254
Nonrecursive counting digital filter containing
shift register
[NASA-CASE-NPO-11821-1] c08 N73-26175
Event sequence detector with several input and
shift register responsive to clock pulses
[NASA-CASE-NPO-11703-1] c10 N73-32144
Method and apparatus for decoding compatible
convolutional codes
[NASA-CASE-MSC-14070-1] c07 N74-32598
Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c08 N74-32648
- SHOCK ABSORBERS**
Pivotal shock absorbing assembly for use as load
distributing portion in landing gear systems
of space vehicles
[NASA-CASE-XMP-03856] c31 N70-34159
Energy dissipating shock absorbing system for
land payload recovery or vehicle braking
[NASA-CASE-XLA-00754] c15 N70-34850
Shock absorbing couch for body support under
high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
Low onset rate energy absorber in form of strut
assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
Landing pad assembly for aerospace vehicles
[NASA-CASE-XMP-02853] c31 N70-36654
Spacecraft shock absorbing system for soft
landings
[NASA-CASE-XMP-02108] c31 N70-36845
Shock absorber for landing gear of lunar or
planetary landing modules
[NASA-CASE-XMP-01045] c15 N70-40354
Shock absorbing articulated multiple couch
assembly
[NASA-CASE-MSC-11253] c05 N71-12343
Design and development of double acting shock
absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530
Impact energy absorber with decreasing
absorption rate
[NASA-CASE-XLA-01530] c14 N71-23092
Energy absorbing crew couch strut for Apollo
command module
[NASA-CASE-MSC-12279] c15 N72-17450
Shock absorber for use as protective barrier in
impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443

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- Viscoelastic shock absorbing mount for electrical circuit board
[NASA-CASE-NPO-13253-1] c15 N73-31445
Translatory shock absorbers for attitude sensors
[NASA-CASE-MPS-22905-1] c35 N75-10407
- SHOCK LOADS**
Damper system for alleviating air flow shock loads on wind tunnel models
[NASA-CASE-XLA-09480] c11 N71-33612
- SHOCK RESISTANCE**
Removable potting compound for instrument shock protection
[NASA-CASE-XLA-00482] c15 N70-36409
Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
- SHOCK TUBES**
Knife structure for controlling rupture of shock tube diaphragms
[NASA-CASE-XAC-00731] c11 N71-15960
Design, development, and operation of shock tube with bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245
Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N75-11997
- SHOCK WAVE INTERACTION**
Absorptive, nonreflecting barrier mounted between closely spaced jet engines on supersonic aircraft, for preventing shock wave interference
[NASA-CASE-XLA-02865] c28 N71-15563
- SHOCK WAVE LUMINESCENCE**
Method and apparatus for measuring shock layer radiation distribution about high velocity objects
[NASA-CASE-XAC-02970] c14 N69-39896
- SHOCK WAVE PROFILES**
Method and apparatus for measuring shock layer radiation distribution about high velocity objects
[NASA-CASE-XAC-02970] c14 N69-39896
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Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911
Electrical device for developing converging spherical shock waves
[NASA-CASE-MPS-20890] c14 N72-22439
Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
[NASA-CASE-MPS-20861-1] c18 N73-32437
Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
[NASA-CASE-LEW-11915-1] c12 N74-25805
Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N75-11997
- SHOES**
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[NASA-CASE-XLA-08491] c05 N69-21380
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[NASA-CASE-XGS-04808] c03 N69-25146
Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898
Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XLA-06713] c14 N71-28991
- SHROUDS**
Shrouded composite propulsion system configuration
[NASA-CASE-XLA-01043] c28 N71-10780
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High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ARC-10516-1] c23 N74-21300
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Phase locked loop with sideband rejecting properties in continuous wave tracking radar
[NASA-CASE-XNP-02723] c07 N70-41680
- SIDELobe REDUCTION**
Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
[NASA-CASE-XNP-01057] c07 N71-15907
- SIEVES**
Processes for making metal sheets or plaques with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c15 N71-34427
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Design and development of signal detection and tracking apparatus
[NASA-CASE-XGS-03502] c10 N71-20852
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[NASA-CASE-GSC-11744-1] c09 N73-23291
Method and apparatus for a single channel digital communications system --- synchronization of received PCM signal by digital correlation with reference signal
[NASA-CASE-NPO-11302-2] c07 N74-10132
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[NASA-CASE-MSC-14066-1] c10 N74-27705
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Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885
Feedback controller for sampling error signals within single control formulation time interval
[NASA-CASE-GSC-10554-1] c08 N71-29033
Development of family of frequency to amplitude converters for frequency analysis of complex input signal waveforms
[NASA-CASE-MSC-12395] c09 N72-25257
Device for performing statistical time-series analysis of complex electrical signal waveforms
[NASA-CASE-MSC-12428-1] c10 N73-25240
Pulse stretcher for narrow pulses
[NASA-CASE-MSC-14130-1] c10 N74-32711
- SIGNAL DETECTION**
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
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[NASA-CASE-ERC-10089] c23 N72-17747
- SIGNAL DETECTORS**
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[NASA-CASE-XLA-00203] c14 N70-34161
Electrical testing apparatus for detecting amplitude and width of transient pulse
[NASA-CASE-XMP-06519] c09 N71-12519
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[NASA-CASE-XNP-02592] c24 N71-20518
Development of apparatus for generating output signal commensurate with information contained in input signal
[NASA-CASE-ERC-10041] c08 N71-29138
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Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XLA-03076] c07 N71-11266
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Plural recorder system which limits signal recording to signals of sufficient interest
[NASA-CASE-XMS-06949] c09 N69-21467
Alternating current signal generator providing plurality of amplitude modulated output signals
[NASA-CASE-XNP-05612] c09 N69-21468
Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
Apparatus for generating microwave signals at progressively related phase angles for driving antenna array
[NASA-CASE-ERC-10046] c10 N71-18722
System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255
Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
[NASA-CASE-XMP-04367] c09 N71-23545

- Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622
- Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
- Adaptive signal generating system and logic circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374
- Device for monitoring voltage by generating signal when voltages drop below predetermined value
[NASA-CASE-KSC-10020] c10 N71-27338
- System for control of variable signal generator
[NASA-CASE-NPO-11064] c07 N72-11150
- Digital function generator for generating any arbitrary single valued function
[NASA-CASE-NPO-11104] c08 N72-22165
- Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255
- Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07695] c26 N72-25679
- Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-NPO-11147] c14 N72-27408
- An NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c14 N74-28933
- Digital servo control of random sound test excitation --- in reverberant acoustic chamber
[NASA-CASE-NPO-11623-1] c23 N74-31148
- Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270
- System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519
- SIGNAL MIXING**
- Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334
- SIGNAL PROCESSING**
- Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XLA-03076] c07 N71-11266
- Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
- Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-XNP-08274] c10 N71-13537
- Circuitry for developing autocorrelation function continuously within signal receiving period
[NASA-CASE-XNP-00746] c07 N71-21476
- System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
- Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-XAC-10607] c10 N71-23669
- Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622
- Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742
- Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
- Apparatus for filtering input signals
[NASA-CASE-NPO-10198] c09 N71-24806
- Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
- Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866
- Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26142
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
- Development of apparatus for generating output signal commensurate with information contained in input signal
[NASA-CASE-ERC-10041] c08 N71-29138
- Development of electric circuit for production of different pulse width signals
[NASA-CASE-XLA-07788] c09 N71-29139
- Phase shifting circuit for selecting phase of input signal
[NASA-CASE-ARC-10269-1] c10 N72-16172
- Processing system for semiperiodic electrical signals to produce real time contoured display
[NASA-CASE-MSC-13407-1] c10 N72-20225
- Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119
- Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
[NASA-CASE-ERC-10267] c09 N72-23173
- Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NPO-11358] c07 N72-25172
- Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187
- Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NPO-11572] c07 N73-16121
- Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386
- Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c08 N73-32081
- Anti-multipath digital signal detector
[NASA-CASE-LAR-11379-1] c07 N74-11005
- Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c09 N74-11050
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Development of electronic circuit for combining input signals on two separate antennas to form two processed signals
[NASA-CASE-MSC-12205-1] c07 N71-27056

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[NASA-CASE-ERC-10275] c26 N72-25680

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[NASA-CASE-XNP-05254] c07 N71-20791

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[NASA-CASE-XNP-04367] c09 N71-23545

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[NASA-CASE-ERC-10112] c07 N72-21119

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Superconductive resonant cavity for improved signal to noise ratio in communication signal
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- Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
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[NASA-CASE-XLA-07497] c09 N71-12514
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- Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906
- Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
- Silica reusable surface insulation
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- Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
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- Ceramic coating for silica insulation
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- Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
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SIZE DETERMINATION

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- [NASA-CASE-XLA-01243] c33 N71-22792
Nonflammable coating compositions --- for use in high oxygen environments
- [NASA-CASE-MFS-20486-2] c18 N74-17283
SPACECRAFT COMMUNICATION
Synchronizing apparatus for multi-access satellite time division multiplex system
- [NASA-CASE-XGS-05918] c07 N69-39974
Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
- [NASA-CASE-XNP-00911] c08 N70-41961
Design and development of tracking receiver for tracking satellites and receiving radio signal transmissions under adverse noise conditions
- [NASA-CASE-XGS-08679] c10 N71-21473
Microwave omnidirectional antenna for use on spacecraft
- [NASA-CASE-XLA-03114] c09 N71-22888

SPACECRAFT COMPONENTS

SUBJECT INDEX

VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-XKS-09340] c07 N71-24614

System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577

Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c09 N74-20864

SPACECRAFT COMPONENTS

Rectangular electric conductors for conductor cables to withstand spacecraft vibration and controlled atmosphere
[NASA-CASE-MPS-14741] c09 N70-20737

Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673

Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906

Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-XGS-00783] c30 N71-17788

Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968

Development and characteristics of docking structure and apparatus for spacecraft docking
[NASA-CASE-XMF-05941] c31 N71-23912

Design and development of release mechanism for spacecraft components, releasable despin weights, and extensible gravity booms
[NASA-CASE-XGS-08718] c15 N71-24600

Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NPO-10141] c11 N71-24964

Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434

Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185

Development of solid state polymer coating for obtaining thermal balance in spacecraft components
[NASA-CASE-XLA-01745] c33 N71-28903

Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842

Development and characteristics of variable ratio, mixed-mode, bilateral master-slave control system for space shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c31 N73-30832

Airlock
[NASA-CASE-MPS-20922-1] c15 N74-22136

Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MPS-21680-1] c32 N74-27397

SPACECRAFT CONFIGURATIONS

Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536

Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924

Stage separation system for spinning vehicles and payloads
[NASA-CASE-XLA-02132] c31 N71-10582

Spacecraft configurations and aerodynamic characteristics of space shuttle systems with two reusable stages
[NASA-CASE-MSC-12433] c31 N73-14854

Space vehicle
[NASA-CASE-MPS-22734-1] c18 N75-19329

SPACECRAFT CONSTRUCTION MATERIALS

Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996

Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or

indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

SPACECRAFT CONTROL

Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158

Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395

Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-00898] c02 N70-36804

Attitude control device for space vehicles
[NASA-CASE-XNP-00294] c21 N70-36938

Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943

Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities
[NASA-CASE-XMS-04442] c31 N70-41631

Star sensor system for roll attitude control of spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856

Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771

Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132

Development of attitude control system for spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159

Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-XMF-01598] c21 N71-15583

Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642

Large amplitude, linear inertial reference system of vibrating string type for spacecraft reference plane
[NASA-CASE-XAC-03107] c23 N71-16098

Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081

Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173

Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766

Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595

SPACECRAFT DESIGN

Lunar landing flight research vehicle
[NASA-CASE-XFR-00929] c31 N70-34966

Design and configuration of manned space capsule
[NASA-CASE-XLA-01332] c31 N71-15664

Development of spacecraft radiator cover
[NASA-CASE-MSC-12049] c31 N71-16080

Method and apparatus for connecting two spacecraft with probe of one inserted in rocket engine nozzle of other spacecraft
[NASA-CASE-MPS-11133] c31 N71-16222

Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679

Development and characteristics of self supporting space vehicle
[NASA-CASE-XLA-00117] c31 N71-17680

Multi-mission space vehicle module stage design
[NASA-CASE-XMF-01543] c31 N71-17730

Development and characteristics of docking structure and apparatus for spacecraft docking
[NASA-CASE-XMF-05941] c31 N71-23912

Design and development of spacecraft with outer shell structure heat shielding and built-in,

SUBJECT INDEX

SPACECRAFT POSITION INDICATORS

removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434

Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18859

Space vehicle
[NASA-CASE-MPS-22734-1] c18 N75-19329

SPACECRAFT DOCKING

Probe and drogue assembly for mechanical linking of two space vehicles
[NASA-CASE-XMS-03613] c31 N71-16346

Development and characteristics of docking structure and apparatus for spacecraft docking
[NASA-CASE-XNP-05941] c31 N71-23912

Latch for fastening spacecraft docking rings
[NASA-CASE-MSC-15474-1] c15 N71-26162

Multiple in-line docking capability having intermeshing docking turrets for rotating space stations
[NASA-CASE-MPS-20855-1] c31 N72-25853

High energy absorption docking system design for docking large spacecraft
[NASA-CASE-MPS-20863] c31 N73-26876

Development of spacecraft docking system for optical alignment of spacecraft using television camera system
[NASA-CASE-MSC-12559-1] c31 N73-26879

Latch mechanism
[NASA-CASE-MSC-12549-1] c15 N74-27903

A deployable flexible tunnel
[NASA-CASE-MPS-22636-1] c18 N75-14818

SPACECRAFT ELECTRONIC EQUIPMENT

Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391

Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XNP-01667] c15 N71-17647

Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984

SPACECRAFT ENVIRONMENTS

Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203

Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
[NASA-CASE-MPS-11132] c15 N71-17649

Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725

Dual stage check valve for cryogenic supply systems used in space flight environmental control system
[NASA-CASE-MSC-13587-1] c15 N73-30459

Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-MPS-21163-1] c05 N74-17853

SPACECRAFT GUIDANCE

Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996

Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
[NASA-CASE-XNP-00684] c21 N71-21688

Design and characteristics of device for sensing solar radiation and providing spacecraft attitude control to maintain direction with respect to incident radiation
[NASA-CASE-XNP-05535] c14 N71-23040

Inertial gibal alignment system for spacecraft guidance
[NASA-CASE-XNP-01669] c21 N71-23289

Hermetically sealed vibration damper design for use in gibal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243

SPACECRAFT INSTRUMENTS

Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907

Air bearings for spacecraft gyros
[NASA-CASE-XNP-00339] c15 N70-39896

Unfolding boom assembly with knuckle joints for positioning equipment for spacecraft
[NASA-CASE-XGS-00938] c32 N70-41367

Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996

Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621

Inertial component clamping assembly design for spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813

Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882

Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268

Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118

Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion
[NASA-CASE-HQB-10439] c21 N72-21624

Design and development of thermomechanical pump for transmitting warning fluid through fluid circuit to control temperature of spacecraft instrumentation
[NASA-CASE-NPO-11417] c15 N73-24513

Deployable pressurized cell structure for a micrometeoroid detector
[NASA-CASE-LAB-10295-1] c15 N74-21062

SPACECRAFT LANDING

Non-reusable kinetic energy absorber for application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861

Plastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778

Device for use in descending spacecraft as altitude sensor for actuating deceleration retrorockets
[NASA-CASE-XMS-03792] c14 N70-41812

SPACECRAFT LAUNCHING

Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694

Development and characteristics of squib actuated explosive disconnect for spacecraft release from launch vehicle
[NASA-CASE-NPO-11330] c33 N73-26958

SPACECRAFT MODELS

Space environment simulation system for measuring spacecraft electric field strength in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086

SPACECRAFT MODULES

Radial module manned space station with artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373

Multi-mission space vehicle module stage design
[NASA-CASE-XNP-01543] c31 N71-17730

Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434

Development and characteristics of thermal control system for maintaining constant temperature within spacecraft module with wide variations of component heat transfer
[NASA-CASE-GSC-11018-1] c31 N73-30829

SPACECRAFT POSITION INDICATORS

Device for determining relative angular position of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490

SPACECRAFT POWER SUPPLIES

SUBJECT INDEX

Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640

SPACECRAFT POWER SUPPLIES

Spacecraft battery seals
[NASA-CASE-XGS-03864] c15 N69-24320

Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-XMF-00517] c03 N70-34157

Lightweight, rugged, inexpensive satellite battery for producing electrical power from ionosphere using electrodes with different contact potentials
[NASA-CASE-XGS-01593] c03 N70-35408

Design and development of electric generator for space power system
[NASA-CASE-XLE-04250] c09 N71-20446

Monostable multivibrator for conserving power in spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221

Control circuit for nuclear thermionic converter power source for spacecraft
[NASA-CASE-NPO-13114-1] c22 N73-13656

Rectangular solar cell stacked panels to generate electrical power aboard spacecraft
[NASA-CASE-NPO-11771] c03 N73-20040

Thermoelectric power system --- for outer planet space flight
[NASA-CASE-MPS-22002-1] c03 N74-18726

SPACECRAFT PROPULSION

Colloidal particle generator for electrostatic engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265

Spacecraft trajectory correction propulsion system
[NASA-CASE-XNP-01104] c28 N70-39931

Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293

Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160

SPACECRAFT RECOVERY

Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-XMF-00641] c31 N70-36410

Method for deployment of flexible wing glider from space vehicle with minimum impact and loading
[NASA-CASE-XMS-00907] c02 N70-41630

SPACECRAFT REENTRY

Manned space capsule configuration for orbital flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37938

Event recorder with constant speed motor which rotates recording disk
[NASA-CASE-XLA-01832] c14 N71-21006

SPACECRAFT SHIELDING

Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679

Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover
[NASA-CASE-MPS-20355] c33 N71-25353

Binder stabilized zinc oxide pigmented coating for spacecraft thermal control
[NASA-CASE-XMF-07770-2] c18 N71-26772

SPACECRAFT STABILITY

Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082

Development and characteristics of annular momentum control device for two axis stabilization of spacecraft
[NASA-CASE-XLA-11051-1] c21 N73-28646

Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089

An improved system for imposing directional stability on a rocket-propelled vehicle
[NASA-CASE-MPS-21311-1] c31 N74-30311

SPACECRAFT STRUCTURES

Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XMF-00437] c07 N70-40202

Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections

[NASA-CASE-XMF-00908] c14 N70-40238

Development of spacecraft radiator cover
[NASA-CASE-MSC-12049] c31 N71-16080

Design and construction of satellite appendage tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064

Development and characteristics of thermal sensitive panel for controlling ratio of solar absorptivity to surface emissivity for space vehicle temperature control
[NASA-CASE-XLA-07728] c33 N71-22890

Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936

Delayed simultaneous appendage release mechanism for use on spacecraft equipped with despin mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039

Development of composite structures for spacecraft to serve as anti-meteoroid device
[NASA-CASE-LAR-10788-1] c31 N73-20880

Space vehicle system
[NASA-CASE-MSC-12561-1] c31 N74-33303

Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222

SPACECRAFT TELEVISION

Electrically operated rotary shutter for television camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273

Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300

SPACECRAFT TRACKING

Spacecraft ranging system
[NASA-CASE-NPO-10066] c09 N71-18598

Elimination of tracking occultation problems occurring during continuous monitoring of interplanetary missions by using Earth orbiting communications satellite
[NASA-CASE-XAC-06029-1] c31 N71-24813

Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MPS-14017] c14 N71-26627

Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015

SPACECREWS

Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851

SPALLATION

Production of iodine isotope by high energy bombardment of cesium heat pipe causing spallation reaction
[NASA-CASE-LEW-11390-2] c24 N73-20763

SPARK GAPS

Spark gap type protective circuit for fast sensing and removal of overvoltage conditions
[NASA-CASE-XAC-08981] c09 N69-39897

Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976

SPARK IGNITION

High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925

SPARK PLUGS

High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925

SPATIAL DISTRIBUTION

Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339

SPATIAL FILTERING

Photographic film restoration system using Fourier transformation lenses and spatial filter
[NASA-CASE-MSC-12448-1] c14 N72-20394

Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c16 N74-34010

SPECTRAL REFLECTANCE

Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c14 N74-23040

SPECTROMETERS

Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XNP-04161] c14 N71-15599
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XNP-05231] c14 N73-28491
Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
[NASA-CASE-MPS-21441-1] c14 N73-30392
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c14 N74-15091
Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c14 N74-23040
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890
Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613
Frequency scanning particle size spectrometer
[NASA-CASE-NPO-13606-1] c35 N75-19627

SPECTROPHOTOMETERS

Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
Particle size spectrometer and refractometer
[NASA-CASE-NPO-13614-1] c35 N75-19628

SPECTROSCOPIC ANALYSIS

Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206

SPECTRUM ANALYSIS

Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XNP-04161] c14 N71-15599
Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XNP-02039] c15 N71-15871
Method and apparatus for high resolution power spectrum analysis
[NASA-CASE-NPO-10748] c08 N72-20177
Real time analysis of voiced sounds
[NASA-CASE-NPO-13465-1] c71 N75-13593

SPEED CONTROL

System for maintaining motor at predetermined speed using digital pulses
[NASA-CASE-XNP-06892] c09 N71-24805
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
Low speed phaselock speed control system --- for brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N74-10202
Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel
[NASA-CASE-MPS-20645-1] c15 N74-23070

SPEED REGULATORS

Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MPS-14610] c09 N71-28886

SPHERES

Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117
Anti-gravity device
[NASA-CASE-MPS-22758-1] c15 N74-22146

SPHERICAL SHELLS

Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542

Development of mechanical device for measuring distance of point within sphere from surface of sphere
[NASA-CASE-XLA-06683] c14 N72-28436

SPHERICAL TANKS

Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-XMS-06236] c14 N71-21007

SPHERICAL WAVES

Electrical device for developing converging spherical shock waves
[NASA-CASE-MPS-20890] c14 N72-22439

SPIKE NOZZLES

Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647

SPIN DYNAMICS

Nutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513

SPIN REDUCTION

Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
Bolt-latch mechanism for releasing despin weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
Stretch Yo-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016
Stage separation system for spinning vehicles and payloads
[NASA-CASE-XLA-02132] c31 N71-10582
Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XNP-00442] c31 N71-10747

SPIN STABILIZATION

Dynamic precession damping of spin-stabilized vehicles by using rate gyroscope and angular accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295
Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-XGS-05579] c31 N71-15676
High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
Passive dual spin misalignment compensators --- gyro stabilized device
[NASA-CASE-GSC-11479-1] c21 N74-28097
Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c02 N74-30421

SPIRAL WRAPPING

Adjustable spiral wire winding device
[NASA-CASE-XMS-02383] c15 N71-15918

SPIRALS (CONCENTRATORS)

Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c15 N74-10474

SPIROMETERS

Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-IAR-01547] c05 N69-21473

SPLINTS

Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XNP-06589] c05 N71-23159

SPORES

Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c15 N74-13178

SPOT WELDS

Controlled arc spot welding method
[NASA-CASE-XNP-00392] c15 N70-34814
Automatic closed circuit television arc guidance control for welding joints

SPRAYED COATINGS

[NASA-CASE-MFS-13046] c07 N71-19433
Electric resistance spot welding and brazing for
producing metal bonds with superior mechanical
and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535

SPRAYED COATINGS

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[NASA-CASE-XLE-01604-2] c15 N71-15610
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[NASA-CASE-XLA-04251] c18 N71-26100
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[NASA-CASE-GSC-11163-1] c15 N73-32360

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turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372
Adhesive spray process for attaching biomedical
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[NASA-CASE-XPR-07658-1] c05 N71-26293
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blades
[NASA-CASE-XLE-00027] c33 N71-29152

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Aircraft wheel spray drag alleviator for dual
tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825

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loose elements from terminal posts during
winding of filamentary elements
[NASA-CASE-XMP-02107] c15 N71-10809

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having low hysteresis
[NASA-CASE-XNP-09452] c15 N69-27504
Multiple Belleville spring assembly with even
load distribution
[NASA-CASE-XNP-00840] c15 N70-38225
Switching mechanism with energy stored in coil
spring
[NASA-CASE-XGS-00473] c03 N70-38713
Load cell protection device using spring-loaded
breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974
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helical compression springs
[NASA-CASE-NPO-11012] c15 N72-11391

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having high degree of crystallographic
perfection
[NASA-CASE-ERC-10120] c26 N69-33482
Development of procedure for producing thin
transparent films of zinc oxide on transparent
refractory substrate
[NASA-CASE-PRC-10019] c15 N73-12487
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apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c28 N74-31269
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[NASA-CASE-NPO-13345-1] c37 N75-19684

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phase relationship between two square wave
input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596

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combustion products from ambient surroundings
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nose-down pitching moments due to high lift
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[NASA-CASE-LAR-11252-1] c02 N73-26007

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[NASA-CASE-MSC-12293-1] c14 N72-27411
System for controlling torque buildup in
suspension of gondola connected to balloon by
parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
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augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
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and decelerating flaps with reference to
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[NASA-CASE-XLE-00266] c14 N70-34156

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Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MPS-07369] c15 N71-20443

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[NASA-CASE-XNP-01307] c21 N70-41856

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[NASA-CASE-XGS-01159] c21 N71-10678

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[NASA-CASE-XNP-03914] c21 N71-10771

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[NASA-CASE-GSC-11188-1] c14 N73-32320

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[NASA-CASE-LAR-11352-1] c09 N74-19854

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[NASA-CASE-XNP-01058] c09 N71-12540

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[NASA-CASE-XNP-08680] c14 N71-22995

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[NASA-CASE-XNP-00663] c08 N71-18752

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[NASA-CASE-XGS-05289] c09 N71-19470

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[NASA-CASE-XLE-01481] c14 N71-10781

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[NASA-CASE-XMS-04545] c15 N71-22878

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[NASA-CASE-XLA-00481] c14 N70-36824

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[NASA-CASE-XLA-00128] c15 N70-37925

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[NASA-CASE-XLE-00785] c33 N71-16104

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Zinc dust formulation for abrasion resistant steel coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581

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[NASA-CASE-XNP-02389] c07 N71-28900

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[NASA-CASE-GSC-11446-1] c09 N74-20860

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[NASA-CASE-XNP-06510] c14 N71-23797

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Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797

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[NASA-CASE-LAR-10176-1] c14 N72-20380

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[NASA-CASE-MSC-12616-1] c07 N74-32601

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[NASA-CASE-ARC-10160-1] c23 N72-27728

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[NASA-CASE-XNP-01749] c27 N70-41897

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[NASA-CASE-XNP-09763] c14 N71-20461

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[NASA-CASE-LAR-10076-1] c05 N73-20137

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[NASA-CASE-GSC-10225-1] c06 N73-27086

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[NASA-CASE-NPO-10694] c09 N72-20200

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[NASA-CASE-ERC-10178] c16 N71-24832

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[NASA-CASE-XAC-06956] c15 N71-21177

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[NASA-CASE-XGS-02631] c03 N71-23006

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[NASA-CASE-NPO-11021] c03 N72-20032
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[NASA-CASE-LAR-10373-1] c18 N71-26155
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[NASA-CASE-XNP-00612] c11 N70-38182
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[NASA-CASE-XNP-02392] c32 N71-24285
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[NASA-CASE-XLA-00492] c14 N70-34799
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[NASA-CASE-XMS-05936] c14 N70-41682
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[NASA-CASE-MPS-12827] c14 N71-17656
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[NASA-CASE-XLE-00023] c15 N70-33330
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[NASA-CASE-LAR-11500-1] c35 N75-13227
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[NASA-CASE-ARC-10154-1] c14 N72-22440
- Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating
[NASA-CASE-LAR-10765-1] c32 N73-20740
- High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N75-13227
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[NASA-CASE-NPO-10271] c17 N71-16393
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[NASA-CASE-XLA-04980] c09 N69-27422
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[NASA-CASE-MPS-12827] c14 N71-17656
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[NASA-CASE-XLA-08530] c32 N71-25360
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[NASA-CASE-MPS-21488-1] c14 N73-23526
- Development of strain gage mounting assembly for amplifying measurable deformation applied to strain gage
[NASA-CASE-NPO-13170-1] c14 N73-28495
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[NASA-CASE-XLA-01807] c15 N71-10799
- STRESSES**
Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
- Strain gage measurement of elongation due to thermally and mechanically induced stresses
[NASA-CASE-XGS-04478] c14 N71-24233
- Strain arrestor plate --- bonding rigid thermal insulation tiles to metallic plates or structural parts
[NASA-CASE-MSC-14482-1] c18 N74-15213
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[NASA-CASE-XMS-04170] c05 N71-22748
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[NASA-CASE-XMF-06589] c05 N71-23159
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[NASA-CASE-XNP-00710] c15 N71-10778
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[NASA-CASE-FRC-10063] c01 N71-12217
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[NASA-CASE-XLA-04901] c31 N71-24315
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spurious radiation patterns of antenna array
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[NASA-CASE-XMS-05303] c07 N69-27462
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large structural members and maintaining
correct position
[NASA-CASE-XNP-02029] c14 N70-41955
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supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
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shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467
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using pairs of elongate hollow ribs of
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[NASA-CASE-LAR-11052-1] c32 N73-13929
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with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457
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[NASA-CASE-MSC-14182-1] c18 N74-15213
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[NASA-CASE-XLA-11028-1] c18 N74-27035
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device using pendulum
[NASA-CASE-XNP-00479] c14 N70-34794
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[NASA-CASE-XLA-03135] c32 N71-16428
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control for arbitrarily shaped structures
[NASA-CASE-LAR-10098] c32 N71-26681
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[NASA-CASE-MSC-12279-1] c15 N70-35679
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applied to installation of spacecraft antennas
[NASA-CASE-NPO-11751] c07 N73-24176
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two or more load-carrying structural members
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tool for forming studs in honeycomb material
[NASA-CASE-MPS-21485-1] c15 N74-25968
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two subminiature thermionic diodes with
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[NASA-CASE-XNP-00384] c09 N71-13530
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with truncated concave ellipsoid subreflector
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hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
- Construction of leading edges of surfaces for
aerial vehicles performing from subsonic to
above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
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at hypersonic and subsonic speeds
[NASA-CASE-LAR-10706-1] c18 N75-16613
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aircraft models at subsonic speeds
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[NASA-CASE-XNP-00595] c15 N70-34967
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[NASA-CASE-XNP-00826] c03 N71-20895
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[NASA-CASE-ARC-10099-1] c18 N71-15469
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Electrolytic cell design
[NASA-CASE-LAR-11042-1] c03 N74-29416
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for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
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[NASA-CASE-LAR-11675-1] c74 N75-20091
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Describing circuit for obtaining sum of squares
of numbers
[NASA-CASE-XGS-04765] c08 N71-18693
- SUNGLASSES**
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survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
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Illumination system design for use as sunlight
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[NASA-CASE-HQN-10781] c23 N71-30292
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[NASA-CASE-XAC-02407] c14 N69-27423
Improved alternator with windings of
superconducting materials acting as permanent
magnet
[NASA-CASE-XLE-02824] c03 N69-39890
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staggered magnetic field and suitable for
broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
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[NASA-CASE-XNP-06503] c23 N71-29049
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[NASA-CASE-NPO-13388-1] c35 N75-11309
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[NASA-CASE-XLE-02823] c09 N71-23443
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[NASA-CASE-MSC-12259-2] c07 N72-33146
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[NASA-CASE-XNP-01185] c26 N73-28710
A doped Josephson tunneling junction for use in
a sensitive IR detector
[NASA-CASE-NPO-13348-1] c14 N74-20022
- SUPERCONDUCTORS**
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force principle to determine acceleration of
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[NASA-CASE-XNP-01099] c14 N71-15969

SUPERFLUIDITY

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- Controlled diffusion reaction process for
masking substrate of twisted multifilament
superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
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[NASA-CASE-LEW-11015] c26 N73-32571
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[NASA-CASE-LEW-11582-1] c09 N74-33739
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Helium refining by superfluidity
[NASA-CASE-XNP-00733] c06 N70-34946
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[NASA-CASE-XLA-00230] c02 N70-33255
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[NASA-CASE-XLA-03659] c02 N71-11041
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horizontal tail assembly for supersonic aircraft
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Absorptive, nonreflecting barrier mounted
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[NASA-CASE-XLA-02865] c28 N71-15563
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- SUPERSONIC AIRFOILS**
Airfoil with cambered trailing edge section for
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[NASA-CASE-LAR-10585-1] c01 N73-14981
- SUPERSONIC COMBUSTION**
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[NASA-CASE-XLA-00221] c02 N70-33266
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comprising elevons with hinge line sweep and
free of adverse aerodynamic cross coupling
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- SUPERSONIC FLOW**
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- SUPERSONIC INLETS**
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[NASA-CASE-XLE-00057] c28 N70-38711
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fixed arc length for use in high temperature
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[NASA-CASE-XAC-01677] c09 N71-20816
- SUPERSONIC SPEEDS**
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plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
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[NASA-CASE-LAR-11552-1] c35 N75-10412
- SUPERSONIC TRANSPORTS**
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using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Traffic control system for supersonic transports
using synchronous satellite for data relay
between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
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traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
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locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
- SUPPORT SYSTEMS**
Hydraulic support apparatus for dynamic testing
of space vehicles under near-free flight
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[NASA-CASE-XNP-03248] c11 N71-10604
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[NASA-CASE-XNP-06031] c15 N71-15606
Multilegged support system for wind tunnel test
models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
Adjustable support device with jacket screw for
altering distance between base and supported
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[NASA-CASE-NPO-10721] c15 N72-27484
- SUPPORTS**
Support techniques for restraint of slender
bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
Pneumatic control of telescopic mirror support
system
[NASA-CASE-XLA-03271] c11 N69-24321
Optical scanner mounted on rotating support
structure with method of compensating for
image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
Support for flexible conductor cable between
drawers or racks holding electronic equipment
and cabinet assembly housing drawers or racks
[NASA-CASE-XNP-07587] c15 N71-18701
Swivel support for gas bearing for position
adjustment between ball and supporting cup
[NASA-CASE-XNP-07808] c15 N71-23812
Tracking mount for laser telescope employed in
tracking large rockets and space vehicles to
give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
Gas bearing for model support with capacity for
measuring angular displacement of model in
bearing
[NASA-CASE-XLA-09346] c15 N71-28740
Adjustable rigid mount for trihedral mirror
formed of alloy with small coefficient of
thermal expansion supporting screws and
spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
Slotted fine-adjustment support for optical
devices
[NASA-CASE-MFS-20249] c15 N72-11386
Base support for expansible and contractible
coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454
Optical mirror support system
[NASA-CASE-XER-07896-2] c23 N72-22673
Fixture for supporting articles during vibration
tests comprising integral annular unit
[NASA-CASE-MFS-20523] c14 N72-27412
Design and development of test stand system for
supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267
Collapsible support for antenna reflector
applied to installation of spacecraft antennas
[NASA-CASE-NPO-11751] c07 N73-24176
Viscoelastic shock absorbing mount for
electrical circuit board
[NASA-CASE-NPO-13253-1] c15 N73-31445
Method of making porous conductive supports for
electrodes --- by electroforming and stacking
nickel foils
[NASA-CASE-GSC-11367-1] c03 N74-19692
Thrust-isolating mounting --- characteristics of
support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c32 N74-27397
- SUPPRESSORS**
Electronic background suppression field scanning
sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980
- SURFACE DEFECTS**
Surface defect detection by reflected microwave
radiation pattern
[NASA-CASE-ARC-10009-1] c15 N71-17822

- Method and device for detection of surface discontinuities or defects
[NASA-CASE-MSC-14187-1] c14 N74-32879
- SURFACE DIFFUSION**
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
- SURFACE FINISHING**
Development of procedure for producing thin transparent films of zinc oxide on transparent refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487
Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
[NASA-CASE-MPS-20243] c23 N73-13662
- SURFACE IONIZATION**
Electrodes having array of small surfaces for field ionization
[NASA-CASE-ERC-10013] c09 N71-26678
Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- SURFACE LAYERS**
Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739
Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c06 N74-19769
- SURFACE PROPERTIES**
Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment
[NASA-CASE-XMS-03537] c15 N69-21471
Ablation article and surface for analyzing flow transition on ablative surface
[NASA-CASE-LAR-10439-1] c33 N73-27796
Dual measurement ablation sensor
[NASA-CASE-LAR-10105-1] c33 N74-15652
Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c14 N74-20009
Apparatus for microbiological sampling --- including automatic swabbing
[NASA-CASE-LAR-11069-1] c35 N75-12272
- SURFACE REACTIONS**
Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446
- SURFACE ROUGHNESS**
Roughness detector for recording surface pattern of irregularities
[NASA-CASE-XLA-00203] c14 N70-34161
Optical apparatus for visual detection of roundness and regularity of cone surfaces
[NASA-CASE-XMP-00462] c14 N70-34298
Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586
- SURFACE ROUGHNESS EFFECTS**
Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XMP-04163] c02 N71-23007
- SURFACE VEHICLES**
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
Development of radio locating system for monitoring geographic movement of surface vehicles in metropolitan area using unsynchronized radio broadcasting stations
[NASA-CASE-NPO-13217-1] c07 N73-26144
Self-propelled vehicle with wheel, track laying, and walking capability for exploratory expolaration
[NASA-CASE-NPO-11366] c11 N73-26238
Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c16 N74-15145
Recording apparatus
[NASA-CASE-LAR-11353-1] c14 N74-20020
- SURFACE WAVES**
Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna
- [NASA-CASE-XLA-10772] c07 N71-28980
- SURFACES**
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XMP-00389] c31 N70-34176
Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-INP-08680] c14 N71-22995
Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c14 N74-13129
- SURGERY**
Surgical liquification pump for removing macerated tissue from eye
[NASA-CASE-LEW-12051-1] c04 N73-32000
- SURGES**
Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984
Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- SURGICAL INSTRUMENTS**
Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062
Surgical liquification pump for removing macerated tissue from eye
[NASA-CASE-LEW-12051-1] c04 N73-32000
- SURVIVAL EQUIPMENT**
Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
Pliable frame for sunglasses in emergency survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
- SUSPENDING (HANGING)**
Parallel motion suspension device for measuring instruments
[NASA-CASE-XNP-01567] c15 N70-41310
Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- SWEAT COOLING**
Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c15 N74-32919
- SWEEP CIRCUITS**
Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926
- SWEEP EFFECT**
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- SWELLING**
Para-benzoquinone dioxide and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
- SWEEP WINGS**
Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
- SWIRLING**
Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569
Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665
- SWITCHES**
Switching mechanism with energy stored in coil spring
[NASA-CASE-IGS-00473] c03 N70-38713

- Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
- Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202
- SWITCHING CIRCUITS**
- Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
- Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
- Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-XNP-00517] c03 N70-34157
- High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
- Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032
- Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
- Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
- Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NPO-10201] c08 N71-18694
- Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723
- Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724
- Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751
- Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
- Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-XNP-03934] c09 N71-22985
- Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033
- Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
- Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271
- Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
- Microwave waveguide switch with rotor position control
[NASA-CASE-XNP-06507] c09 N71-23548
- Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
- Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799
- Inverters for changing direct current to alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
- Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-XNP-08567] c09 N71-26000
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774
- Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126
- Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28860
- Digital magnetic core memory with sensing amplifier circuits
[NASA-CASE-XNP-01012] c08 N71-28925
- Current regulating voltage divider design with load current shunting
[NASA-CASE-MFS-20935] c09 N71-34212
- Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157
- Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031
- Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199
- Switching type voltage regulator with relatively simple circuit arrangement
[NASA-CASE-LEW-11005-1] c09 N72-21243
- Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NPO-11333] c08 N72-22162
- Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197
- Solid state remote circuit selector switching circuit
[NASA-CASE-LEW-10387] c09 N72-22201
- Pressure operated electrical switch responsive to pressure decrease after pressure increase
[NASA-CASE-LAR-10137-1] c09 N72-22204
- Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273
- Electronic video editor for switching video input signals to common output channel
[NASA-CASE-KSC-10003] c10 N73-13235
- Solid state switch for variable circuit switching
[NASA-CASE-NPO-10817-1] c08 N73-30135
- Manually and automatically operable video switching system
[NASA-CASE-KSC-10782-1] c07 N73-32063
- Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-MSC-13746-1] c10 N73-32143
- Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MFS-21616-1] c09 N74-21859
- High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c07 N74-22814
- Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c62 N75-12652
- The dc-to-dc converters employing staggered phase power switches with two loop control
[NASA-CASE-NPO-13512-1] c33 N75-15876
- SWITCHING THEORY**
- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909

SWIVELS

Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XNP-07808] c15 N71-23812

SYNCHRONISM

Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39974
Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-XNP-08875] c10 N71-23099
Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326
System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577

SYNCHRONIZED OSCILLATORS

Development of phase demodulation system with two phase locked loops
[NASA-CASE-XNP-00777] c10 N71-19469
Phase locked phase modulation system with voltage controlled oscillator for final phase linearity
[NASA-CASE-XNP-05382] c10 N71-23544
Automatic frequency control device for providing frequency reference for voltage controlled oscillator
[NASA-CASE-KSC-10393] c09 N72-21247

SYNCHRONIZERS

Development and characteristics of burst synchronization detection system
[NASA-CASE-XMS-05605-1] c10 N71-19468
Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
Design and development of synchronous servo loop control system
[NASA-CASE-XNP-03744] c10 N71-20448
Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c07 N74-20809
Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c07 N74-20810
System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519

SYNCHRONOUS MOTORS

Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
Motor run-up system --- power lines
[NASA-CASE-NPO-13374-1] c33 N75-19524

SYNCHRONOUS SATELLITES

Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Serrrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-XGS-01022] c07 N71-16088
Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149

Development of device for simulating charge and discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020

SYNTHESIS

Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XNP-08651] c06 N71-11236
Preparation of ordered poly(arylenesiloxane)/polyamers
[NASA-CASE-XNP-10753] c06 N71-11237
Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980

SYNTHESIZERS

Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525

SYNTHETIC FIBERS

Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

SYNTHETIC RESINS

Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895

SYSTEM FAILURES

Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
Fault-tolerant clock apparatus for use in digital logic systems which maintains output pulses during component failure
[NASA-CASE-MSC-12531-1] c14 N73-22386

SYSTEMS ANALYSIS

Analog to digital converter analyzing system
[NASA-CASE-NPO-10560] c08 N72-22166
Pseudo-noise test set for communication system evaluation
[NASA-CASE-MPS-22671-1] c14 N74-13146

SYSTEMS ENGINEERING

Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Solar battery with interconnecting means for plural cells
[NASA-CASE-XNP-06506] c03 N71-11050
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
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[NASA-CASE-XAC-04885] c14 N71-23790
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Automatic system for measuring and monitoring systolic and diastolic blood pressure in humans

[NASA-CASE-MSC-13999-1]

c05 N72-25142

T

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Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896

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[NASA-CASE-MPS-20385] c09 N71-24904

Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MPS-20418] c14 N73-24473

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Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807

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[NASA-CASE-XLA-00487] c14 N70-40157

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Integrated circuit tangnet function generator
[NASA-CASE-MSC-13907-1] c10 N73-26230

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Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XMF-01899] c31 N70-41948

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Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
[NASA-CASE-MSC-12280] c27 N71-16348

Development of apparatus and method for testing leakage of large tanks
[NASA-CASE-XMF-02392] c32 N71-24285

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[NASA-CASE-LAR-10961-1] c15 N73-12496

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[NASA-CASE-NPO-11138] c03 N70-34646

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[NASA-CASE-XLE-04788] c09 N71-22987

Organometallic compounds of niobium and tantalum useful for film deposition
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[NASA-CASE-XLA-03105] c15 N69-27483

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Development of thin film temperature sensor from TaO
[NASA-CASE-NPO-11775] c26 N72-28761

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Plural recorder system which limits signal recording to signals of sufficient interest
[NASA-CASE-XMS-06949] c09 N69-21467

Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-IGS-01223] c07 N71-10609

Development of low friction magnetic recording tape
[NASA-CASE-XGS-00373] c23 N71-15978

Tape guidance system for multichannel digital recording system
[NASA-CASE-XNP-09453] c08 N71-19420

Design and development of synchronous servo loop control system
[NASA-CASE-XNP-03744] c10 N71-20448

Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710

Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback

[NASA-CASE-XGS-01812] c07 N71-23001

Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698

Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866

Closed loop servosystem for variable speed tape recorders onboard spacecraft
[NASA-CASE-NPO-10700] c07 N71-33613

Design and characteristics of recording system for selective reproprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119

Video tape recorder with scan conversion playback for color television signals
[NASA-CASE-NPO-10166-1] c07 N73-22076

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[NASA-CASE-LAR-11353-1] c14 N74-20020

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[NASA-CASE-XLE-00409] c28 N71-15658

Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements
[NASA-CASE-XLE-05689] c28 N71-15659

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Acquisition and tracking system for optical radar
[NASA-CASE-MPS-20125] c16 N72-13437

Target acquisition antenna feed with reflector system
[NASA-CASE-GSC-10064-1] c10 N72-22235

Development of electronic detection system for remotely determining number and movement of enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160

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Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980

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[NASA-CASE-MPS-20482] c15 N72-22492

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[NASA-CASE-NPO-13050-1] c36 N75-15029

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Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XLA-03076] c07 N71-11266

Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281

Automatic estimation of signal to noise ratio and other parameters in signal communication systems
[NASA-CASE-XNP-05254] c07 N71-20791

Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613

Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917

Multicarrier communications system for transmitting modulated signals from single transmitter
[NASA-CASE-NPO-11548] c07 N73-26118

Phase modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c07 N73-27107

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[NASA-CASE-XNP-03623] c09 N73-28084

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[NASA-CASE-MPS-22671-1] c14 N74-13146

Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NPO-11921-1] c07 N74-30523

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Fabrication of pressure-telemetry transducers
[NASA-CASE-XNP-09752] c14 N69-21541

Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333

Development of telemetry system for position location and data acquisition
[NASA-CASE-GSC-10083-1] c30 N71-16090

Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699

Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525

Time division multiplexed telemetry transmitting system controlled by programmed memory
[NASA-CASE-GSC-10131-1] c07 N71-24624

Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NPO-10649] c07 N71-24840

System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577

Zero power telemetry actuated switch for biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153

Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NPO-11358] c07 N72-25172

Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226

Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
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Telemetry and transmission system with programmed sampling and multiplexing
[NASA-CASE-GSC-11388-1] c07 N73-24187

Improved phase lock loop for receiver in multichannel telemetry system with suppressed carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012

Accelerometer telemetry system --- for monitoring motor responses
[NASA-CASE-ARC-10849-1] c35 N75-20685

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Digital communication system
[NASA-CASE-MSC-13912-1] c07 N74-30524

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Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321

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[NASA-CASE-MFS-14017] c14 N71-26627

Development of reflector system for application to line-of-sight pointing and tracking telescopes
[NASA-CASE-NPO-10468] c23 N71-33229

Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27409

Borecope with adjustable hinged telescoping optical system
[NASA-CASE-MFS-15162] c14 N72-32452

Ritchey-Chretien telescope responsive to images located off telescope optical axis
[NASA-CASE-GSC-11487-1] c14 N73-30393

Servo-controlled intravitral microscope system
[NASA-CASE-NPO-13214-1] c14 N74-19093

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[NASA-CASE-XNP-06611] c07 N71-26102

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TV camera output signal control system for digital spacecraft communication
[NASA-CASE-XNP-01472] c14 N70-41807

Solid state television camera system consisting of monolithic semiconductor mosaic sensor and molecular digital readout systems
[NASA-CASE-XMF-06092] c07 N71-24612

Color television system for allowing monochrome television camera to produce color pictures
[NASA-CASE-MSC-12146-1] c07 N72-17109

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Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300

Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433

Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618

Development of spacecraft docking system for optical alignment of spacecraft using television camera system
[NASA-CASE-MSC-12559-1] c31 N73-26879

Television multiplexing system, using single crystal controlled clock for signal synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115

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[NASA-CASE-XMS-06740-1] c07 N71-26579

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[NASA-CASE-ARC-10160-1] c23 N72-27728

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[NASA-CASE-MFS-21040-1] c06 N73-30098

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[NASA-CASE-XAC-00435] c09 N70-35440

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[NASA-CASE-XGS-00458] c09 N70-38604

Matched thermistors for microwave power meters with compensation for temperature changes
[NASA-CASE-NPO-10348] c10 N71-12554

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[NASA-CASE-XGS-02319] c14 N71-22965

Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810

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 [NASA-CASE-ERC-10187] c16 N69-31343
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 [NASA-CASE-IGS-04119] c18 N69-39979
 Passive thermal control coating on aluminum foil laminate for inflatable spacecraft surfaces
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 [NASA-CASE-XNP-00463] c33 N70-36847
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 [NASA-CASE-XLA-00349] c33 N70-37979
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 [NASA-CASE-XNP-00920] c15 N71-15906
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 [NASA-CASE-NPO-10138] c33 N71-16357
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 [NASA-CASE-XNP-09775] c09 N71-20445
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 [NASA-CASE-XNP-02792] c14 N71-28958
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 [NASA-CASE-MSC-13917-1] c05 N72-15098
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 [NASA-CASE-NPO-10633] c03 N72-28025
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 [NASA-CASE-HQN-10654-1] c16 N73-13489
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 [NASA-CASE-NPO-11417] c15 N73-24513
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 [NASA-CASE-ARC-10599-1] c05 N73-26071
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 [NASA-CASE-NPO-11304] c14 N73-26430
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 [NASA-CASE-GSC-11018-1] c31 N73-30829
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 [NASA-CASE-GSC-11620-1] c14 N74-23039

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 [NASA-CASE-XMS-04318] c15 N69-27871

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 [NASA-CASE-XAC-00042] c14 N70-34816
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 [NASA-CASE-XLE-00703] c15 N71-15967
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 [NASA-CASE-MPS-14259] c15 N71-19213
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 [NASA-CASE-XAC-03740] c14 N71-26135
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 [NASA-CASE-MSC-13276-1] c14 N71-27058

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 [NASA-CASE-XAC-00812] c14 N71-15598
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 [NASA-CASE-XNP-08961] c14 N71-24809
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[NASA-CASE-ERC-11020] c14 N71-26774
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- [NASA-CASE-MPS-20675] c26 N73-26751
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- [NASA-CASE-XLE-00144] c28 N70-34860
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- [NASA-CASE-XMP-06926] c28 N71-22983
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[NASA-CASE-GSC-10373-1] c07 N71-19773
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[NASA-CASE-XNP-08875] c10 N71-23099
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[NASA-CASE-NPO-12107] c08 N71-27255
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[NASA-CASE-MPS-13532] c18 N72-17532
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 [NASA-CASE-XMP-02107] c15 N71-10809
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 [NASA-CASE-XLA-07911] c15 N71-15571
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 [NASA-CASE-XMS-06876] c15 N71-21536
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 [NASA-CASE-MPS-20299] c15 N72-11392
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 [NASA-CASE-MPS-21485-1] c15 N74-25968
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 [NASA-CASE-ERC-10338] c04 N72-33072
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 [NASA-CASE-XMP-03287] c15 N71-15607
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 [NASA-CASE-XGS-01881] c09 N70-40123
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 [NASA-CASE-NPO-13413-1] c09 N74-33738
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 [NASA-CASE-XGS-04227] c15 N71-21744
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 [NASA-CASE-XLA-04897] c15 N72-22482
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 [NASA-CASE-NPO-13059-1] c37 N75-10456
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 [NASA-CASE-LAR-11398-1] c37 N75-15994
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 [NASA-CASE-GSC-11127-1] c09 N74-10202
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 Remote-reading torquemeter for use where high horsepower are transmitted at high rotative speeds
 [NASA-CASE-XLE-00503] c14 N70-34818
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 [NASA-CASE-XGS-01013] c14 N71-23725
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 Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
 [NASA-CASE-MSC-12397-1] c05 N72-25119
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 Mechanically operated hand which can depress trigger using touch control device
 [NASA-CASE-MPS-20413] c15 N72-21463
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- [NASA-CASE-MSC-13609-1] c05 N72-25122
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 [NASA-CASE-MPS-16570-1] c05 N73-32013
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 [NASA-CASE-XLA-00415] c03 N70-33343
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 [NASA-CASE-LAR-10634-1] c15 N74-18123
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 [NASA-CASE-XAC-05333] c11 N71-22875
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 [NASA-CASE-NPO-10144] c14 N71-17701
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 [NASA-CASE-XNP-04262-2] c17 N71-26773
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 [NASA-CASE-ERC-10014] c14 N71-28863
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 [NASA-CASE-ARC-10760-1] c35 N75-12275
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 [NASA-CASE-XNP-04180] c07 N69-39736
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 [NASA-CASE-XLA-03273] c14 N71-18699
 Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
 [NASA-CASE-NPO-11087] c23 N71-29125
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 [NASA-CASE-XGS-04994] c09 N69-21543
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 [NASA-CASE-XGS-05582] c07 N69-27460
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 [NASA-CASE-INP-02723] c07 N70-41680
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 [NASA-CASE-XMS-09610] c07 N71-24625
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 [NASA-CASE-MPS-20125] c16 N72-13437
- TRACKING STATIONS**
 Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
 [NASA-CASE-XKS-03509] c14 N71-23175
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 [NASA-CASE-NPO-13292-1] c32 N75-15854
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 [NASA-CASE-MPS-22631-1] c35 N75-13226
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 [NASA-CASE-XLA-01290] c02 N70-42016
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 [NASA-CASE-ARC-10801-1] c02 N74-32428
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 Low and zero gravity simulator for astronaut training
 [NASA-CASE-MPS-10555] c11 N71-19494
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TRAJECTORY ANALYSIS

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[NASA-CASE-XAC-08494] c30 N71-15990

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[NASA-CASE-GSC-11892-1] c14 N74-32888

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[NASA-CASE-XNP-01104] c28 N70-39931

Development of technique for control of free flight rocket vehicles
[NASA-CASE-XLA-00937] c31 N71-17691

Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873

TRANSDUCERS

Fabrication of pressure-telemetry transducers
[NASA-CASE-XNP-09752] c14 N69-21541

Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516

Transducer for measuring deflections from vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428

Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586

Rotary bead dropper and selector for testing micrometeorite transducers
[NASA-CASE-XGS-03304] c09 N71-22988

Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999

Transducer frame for use with extensometer to continuously monitor specimen sample
[NASA-CASE-XLA-10322] c15 N72-17452

Split range transducer
[NASA-CASE-XLA-11189] c10 N72-20222

Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-PRC-10036] c09 N72-22200

Passive type, magnifying scratch gage, force transducer
[NASA-CASE-LAR-10496-1] c14 N72-22437

Development of electronic detection system for remotely determining number and movement of enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160

Acoustical transducer calibrating system including differential pressure activating device
[NASA-CASE-PRC-10060-1] c14 N73-27379

Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c09 N74-17930

Self-supporting strain transducer --- for measuring stress concentration points
[NASA-CASE-LAR-11263-1] c14 N74-25931

LC-oscillator with automatic stabilized amplitude via bias current control --- power supply circuit for transducers
[NASA-CASE-MPS-21698-1] c09 N74-26732

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566

Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c54 N75-17102

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

TRANSFER FUNCTIONS

Electronic optical transfer function analyzer using scanning image dissection system to produce representative output signal
[NASA-CASE-MPS-21672-1] c23 N73-22630

TRANSFER TUNNELS

A deployable flexible tunnel
[NASA-CASE-MPS-22636-1] c18 N75-14818

TRANSFORMERS

Impedance transformation device for signal mixing

[NASA-CASE-XGS-01110] c07 N69-24334

High impedance alternating current sensing transformer device between two bolometers for measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057

Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800

Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893

Development and characteristics of electronically resettable fuse with saturable core current sensing transformer having two outside legs and center leg
[NASA-CASE-XGS-11177] c09 N71-27001

Development and characteristics of voltage regulator for connection in series with alternating current source and load using three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053

Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17948

Current protection equipment for saturable core transformers
[NASA-CASE-ERC-10075-2] c09 N72-22196

Fail-safe multiple transformer circuit configuration
[NASA-CASE-NPO-11078] c09 N72-25262

Banded transformer cores
[NASA-CASE-NPO-11966-1] c09 N74-17928

TRANSIENT LOADS

Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
[NASA-CASE-NPO-10883] c31 N72-22874

TRANSISTOR AMPLIFIERS

Overcurrent protecting circuit for push-pull transistor amplifiers
[NASA-CASE-HSC-12033-1] c09 N71-13531

TRANSISTOR CIRCUITS

Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317

Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463

RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-XMF-00906] c09 N70-41655

Linear sawtooth voltage wave generator with transistor timing circuit having capacitor and zener diode feedback loops
[NASA-CASE-XMS-01315] c09 N70-41675

Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032

High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516

Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015

Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126

Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926

Circuitry for high input impedance video processor with high noise immunity
[NASA-CASE-NPO-10199] c09 N72-17156

Ultra-stable oscillator with complementary transistors
[NASA-CASE-GSC-11513-1] c09 N74-20862

TRANSISTORS

Power supply with overload protection for series stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543

Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799

Broadband distribution amplifier with complementary pair transistor output stages
[NASA-CASE-NPO-10003] c10 N71-26415

Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236

- Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112
- Four phase logic systems --- including integrated microcircuits
[NASA-CASE-MSC-14240-1] c33 N75-14957
- TRANSITION FLOW**
Ablation article and surface for analyzing flow transition on ablative surface
[NASA-CASE-LAR-10439-1] c33 N73-27796
- TRANSLATIONAL MOTION**
Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
- Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
- Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982
- Positioning mechanism for converting translatory motion into rotary motion
[NASA-CASE-NPO-10679] c15 N72-21462
- TRANSMISSION EFFICIENCY**
Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver.
[NASA-CASE-MFS-21470-1] c10 N74-19870
- TRANSMISSION LINES**
Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
[NASA-CASE-XKS-10543] c07 N71-26292
- Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
- Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429
- Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
[NASA-CASE-MFS-13687-2] c09 N72-22198
- Development of phase control coupling for use with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
- Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c10 N74-14956
- System for stabilizing cable phase delay utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c09 N74-17927
- TRANSMITTANCE**
Electro-optical system for scanning variable transmittance objects
[NASA-CASE-NPO-11106-2] c23 N72-28696
- Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
- TRANSMITTER RECEIVERS**
Low weight, integrated thermoelectric generator/antenna combination for spacecraft
[NASA-CASE-XER-09521] c09 N72-12136
- Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173
- Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c09 N74-12912
- Digital communication system
[NASA-CASE-MSC-13912-1] c07 N74-30524
- TRANSMITTERS**
Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NPO-10649] c07 N71-24840
- Multicarrier communications system for transmitting modulated signals from single transmitter
[NASA-CASE-NPO-11548] c07 N73-26118
- Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c07 N74-17888
- Miniature multichannel biotelemetry system
[NASA-CASE-NPO-13065-1] c05 N74-26625
- TRANSONIC SPEED**
Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
[NASA-CASE-XLA-01486] c01 N74-23497
- TRANSONIC WIND TUNNELS**
Wind tunnel test section for simulating high Reynolds number over transonic speed range
[NASA-CASE-MFS-20509] c11 N72-17183
- TRANSPARENCY**
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
- TRANSPARATION**
Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c28 N74-28232
- TRANSPONDERS**
Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
- Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118
- Loop transponder for regenerating code of mu-type ranging system
[NASA-CASE-NPO-11707] c07 N73-25161
- Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c09 N74-12912
- Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c32 N75-15854
- TRANSPORTATION**
Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-XMP-00580] c11 N70-35383
- TRAPS**
Solar energy trap
[NASA-CASE-MFS-22744-1] c44 N75-10586
- Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652
- TRAVELING WAVE AMPLIFIERS**
Serrordyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-XGS-01022] c07 N71-16088
- TRAVELING WAVE MASERS**
Design of folded traveling wave maser structure
[NASA-CASE-XNP-05219] c16 N71-15550
- Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
- TRAVELING WAVE TUBES**
Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
- TRAVELING WAVES**
Traveling wave maser for operation in 7 to 20 GHz frequency range
[NASA-CASE-NPO-11437] c16 N72-28521
- TRIGGER CIRCUITS**
Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463
- Triggering system for electric arc driven impulse wind tunnel
[NASA-CASE-XMP-00411] c11 N70-36913
- Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
- One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468
- Voltage amplitude-responsive trigger circuit with silicon controlled rectifier
[NASA-CASE-GSC-10221-1] c09 N72-23171
- Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c09 N74-20859
- TRIGONOMETRY**
Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
[NASA-CASE-XMP-00684] c21 N71-21688
- TRIMERS**
New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244

- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579
- TRIODES**
Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898
- TRITIUM**
Method for determining state of charge of alkali batteries by using tritium as tracer
[NASA-CASE-XNP-01464] c03 N71-10728
- TRUSSES**
Low mass truss structure with elongated thin-walled tubular segments
[NASA-CASE-LAR-10546-1] c11 N72-25287
Planned major modular assembly jug
[NASA-CASE-MSC-19372-1] c37 N75-11351
- PIPE HEAT EXCHANGERS**
High resistance cross flow heat exchangers for electrothermal rocket engines
[NASA-CASE-XLE-01783] c28 N70-34175
Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094
- TUBES**
Forming tubes from long thin flat metal strips
[NASA-CASE-XGS-04175] c15 N71-18579
Hermetic sealing device for ends of tubular bodies during materials testing operations
[NASA-CASE-NPO-10431] c15 N71-29132
- TUMBLING MOTION**
Tumbling motion system for object demagnetization
[NASA-CASE-XGS-02437] c15 N69-21472
- TUNGSTEN**
Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
Method for producing porous tungsten plates for ionizing cesium compounds for propulsion of ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
Small plasma probe using tungsten wire collector in tubular shield
[NASA-CASE-XLE-02578] c25 N71-20747
Production method for manufacturing porous tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137
Vapor deposition method for forming metallized tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259
- TUNGSTEN ALLOYS**
Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483
Cobalt-tungsten alloys with superior strength at elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415
- TUNING**
Active tuned circuits for microelectronic construction
[NASA-CASE-GSC-11340-1] c10 N72-33230
Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235
- TUNNEL DIODES**
Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317
- TURBINE BLADES**
Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
Modification and improvement of turbine blades for maximum cooling efficiency
[NASA-CASE-XLE-00092] c15 N70-33264
Preparation of nickel alloys for jet turbine blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-33283
External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372
Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152
- Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515
- TURBINE ENGINES**
Method and apparatus for improving operating efficiency and reducing low speed noise for turbine aircraft engines
[NASA-CASE-LAR-11310-1] c28 N73-31699
- TURBINE PUMPS**
Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057
Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c28 N74-13502
- TURBINE WHEELS**
Locking device for retaining turbine rotor blades on turbine wheel
[NASA-CASE-XNP-00816] c28 N71-28928
Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c15 N74-11300
- TURBINES**
Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
- TURBOCOMPRESSORS**
Multistage multiple reentry axial flow reaction turbine with reverse flow reentry ducting
[NASA-CASE-XLE-00170] c15 N70-36412
- TURBOFAN ENGINES**
Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c28 N74-28226
Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c02 N74-32418
- TURBOJET ENGINES**
Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330
- TURBOMACHINERY**
Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154
- TURBOSHAPTS**
Remote-reading torque meter for use where high horsepower are transmitted at high rotative speeds
[NASA-CASE-XLE-00503] c14 N70-34818
- TURBULENT FLOW**
System for measuring Reynolds stress in a turbulently flowing fluid --- signal processing
[NASA-CASE-ARC-10755-2] c34 N75-16770
- TURBULENT WAKES**
Apparatus for span loading to alleviate wake-vortex hazard behind aircraft
[NASA-CASE-ARC-10801-1] c02 N74-32428
- TURNSTILE ANTENNAS**
Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XNP-00442] c31 N71-10747
Broadband modified turnstile antenna for use in space tracking and communications
[NASA-CASE-MSC-12209] c09 N71-24842
Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c09 N74-20864
Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c32 N75-13125
- TURRET**
Indexing mechanism for cathode array substitution in electron beam tube
[NASA-CASE-NPO-10625] c09 N71-26182
- TWO BODY PROBLEM**
Instrument for measuring potentials on two dimensional electric field plot
[NASA-CASE-XLA-08493] c10 N71-19421
- TWO PHASE FLOW**
Solenoid two-step valve for bipropellant flow rate control to rocket engine

[NASA-CASE-XMS-04890-1] c15 N70-22192
Two phase fluid pressurization system for
propellant tank
[NASA-CASE-MSC-12390] c27 N71-29155
Two-phase flow system with discrete, impinging
two-phase jets
[NASA-CASE-NPO-11556] c12 N72-25292
TYPEWRITERS
Guide accessories for correctly aligning paper
in typewriter to correct typographical errors
[NASA-CASE-MPS-15218-1] c15 N73-31438

U

U BENDS

Elbow forming in jacketed pipes while
maintaining separation between core shape and
jacket pipes
[NASA-CASE-XNP-10475] c15 N71-24679

U shaped heated tube for distillation and
purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13126

ULLAGE

Radiation source and detection system for
measuring amount of liquid inside tanks
independently of liquid configuration
[NASA-CASE-MSC-12280] c27 N71-16348

ULTRAHIGH FREQUENCIES

Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c32 N75-13125

ULTRAHIGH VACUUM

Solid lubricant applied to porous roller
bearings prior to use in ultrahigh vacuum
[NASA-CASE-XLE-09527] c15 N71-17688
Calibration of vacuum gauges for measuring total
and partial pressures in ultrahigh vacuum region
[NASA-CASE-XGS-07752] c14 N73-30390
Ultrahigh vacuum gauge with two collector
electrodes

[NASA-CASE-LAR-02743] c14 N73-32324

In situ transfer standard for ultrahigh vacuum
gauge calibration
[NASA-CASE-LAR-10862-1] c14 N74-15092

ULTRASONIC AGITATION

Development of ultrasonic radiation equipment
for removing material from host surface and
vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514

ULTRASONIC RADIATION

Ultrasonic biomedical measuring and recording
apparatus --- for recording motion of internal
organs such as heart valves
[NASA-CASE-ARC-10597-1] c05 N74-20726

ULTRASONIC TESTS

Ultrasonic scanner for radial and flat panels
[NASA-CASE-MPS-20335-1] c14 N74-10415
Ultrasonic scanning system for in-place
inspection of brazed tube joints
[NASA-CASE-MPS-20767-1] c15 N74-15130
Method and apparatus for nondestructive testing
--- using high frequency arc discharges
[NASA-CASE-MPS-21233-1] c23 N74-15395

ULTRASONIC WAVE TRANSDUCERS

Development of ultrasonic radiation equipment
for removing material from host surface and
vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514

Reference apparatus for medical ultrasonic
transducer
[NASA-CASE-ARC-10753-1] c05 N74-13818

Ultrasonic bone densitometer
[NASA-CASE-MPS-20994-1] c35 N75-12271

ULTRASONICS

Ultrasonic wrench for applying vibratory energy
to mechanical fasteners
[NASA-CASE-MPS-20586] c15 N71-17686

Ultrasonic calibration device
[NASA-CASE-LAR-11435-1] c35 N75-11248

ULTRAVIOLET FILTERS

Ultraviolet filter of thorium fluoride and
cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332

Development of ultraviolet resonance lamp with
improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521

ULTRAVIOLET RADIATION

Ultraviolet radiation resistant alkali-metal
silicate coatings for temperature control of
spacecraft

[NASA-CASE-XGS-04419] c18 N69-39979
Development of ultraviolet resonance lamp with
improved transmission of radiation

[NASA-CASE-ARC-10030] c09 N71-12521
Gas leak detection in evacuated systems using
ultraviolet radiation probe

[NASA-CASE-ERC-10034] c15 N71-24896
Phototropic composition of matter with
sensitivity to ultraviolet light and usable
for producing positive photographic images

[NASA-CASE-XGS-03736] c14 N72-22443
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538

Transmitting and reflecting diffuser --- for
ultraviolet light
[NASA-CASE-LAR-10385-2] c23 N74-13436

Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c18 N74-21156

Light shield and cooling apparatus --- high
intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c15 N74-23066

Flame detector operable in presence of proton
radiation
[NASA-CASE-MPS-21577-1] c03 N74-29410

Resistive anode image converter
[NASA-CASE-HQN-10876-1] c35 N75-19621

ULTRAVIOLET REFLECTION

Composition and production method of alkali
metal silicate paint with ultraviolet
reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183

Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c18 N74-10542

ULTRAVIOLET SPECTRA

Ultraviolet chromatographic detector for
quantitative and qualitative analysis of
compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428

ULTRAVIOLET SPECTROMETERS

Concave grating spectrometer for use in near and
vacuum ultraviolet regions
[NASA-CASE-XGS-01036] c14 N70-40003

Telespectrograph for analyzing upper atmosphere
by tracking bodies reentering atmosphere at
high velocities
[NASA-CASE-XLA-03273] c14 N71-18699

UMBILICAL CONNECTORS

Umbilical separator for rockets
[NASA-CASE-XNP-00425] c11 N70-38202

Remotely actuated quick disconnect mechanism for
umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258

Remotely actuated quick disconnect for tubular
umbilical conduits used to transfer fluids
from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259

Internal and external serpentine devices for
performing physical operations around orbital
space stations
[NASA-CASE-XNP-05344] c31 N71-16345

Breakaway multiwire electrical cable connector
with particular application for umbilical type
cables
[NASA-CASE-NPO-11140] c15 N72-17455

Gas operated quick disconnect coupling for
umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450

UMBILICAL TOWERS

Emergency escape cabin system for launch towers
[NASA-CASE-XKS-02342] c05 N71-11199

UNDERWATER ENGINEERING

Ejectable underwater sound source recovery
assembly
[NASA-CASE-LAR-10595-1] c15 N74-16135

UNDERWATER TESTS

Pressure regulator for space suit worn
underwater to simulate space environment for
testing and experimentation
[NASA-CASE-MPS-20332] c05 N72-20097

Underwater space suit pressure control regulator
[NASA-CASE-MPS-20332-2] c05 N73-25125

UNIFORM FLOW

Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969

UNLOADING

Bootstrap unloading circuits for sampling
transducer voltage sources without drawing
current

[NASA-CASE-XNP-09768] c09 N71-12516
UNMANNED SPACECRAFT
 Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments [NASA-CASE-XNP-09770-3] c11 N71-27036
UPPER ATMOSPHERE
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 Voice operated receiving and transmitting system for use in protective suits
 [NASA-CASE-KSC-10164] c07 N71-33108
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 [NASA-CASE-MSC-14219-1] c07 N74-27612
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 [NASA-CASE-MSC-13912-1] c07 N74-30524
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 Apparatus for determining volatile condensable material present in polymeric products
 [NASA-CASE-XNP-09699] c06 N71-24607
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 [NASA-CASE-XMS-01554] c10 N71-10578
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 Increasing power conversion efficiency of electronic amplifiers by power supply switching
 [NASA-CASE-XMS-00945] c09 N71-10798
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 [NASA-CASE-XNP-09768] c09 N71-12516
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 [NASA-CASE-ARC-10020] c10 N72-17172
 Wide range analog to digital converter with variable gain amplifier
 [NASA-CASE-NPO-11018] c08 N72-21200
VOLTAGE CONVERTERS (DC TO DC)
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 [NASA-CASE-HQN-10792-1] c09 N74-11049
 The dc-to-dc converters employing staggered phase power switches with two loop control
 [NASA-CASE-NPO-13512-1] c33 N75-15876
VOLTAGE GENERATORS
 Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
 [NASA-CASE-MSC-13112] c03 N71-11057
 Biotelemetry apparatus with dual voltage generators for implanting in animals
 [NASA-CASE-XAC-05706] c05 N71-12342
 Transistorized circuit for producing multiple slope voltage sweep
 [NASA-CASE-XMS-03542] c09 N71-28926
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 [NASA-CASE-ERC-10268] c09 N72-25252
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 [NASA-CASE-XGS-03429] c03 N69-21330
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 [NASA-CASE-XNP-02713] c10 N69-39888
 Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
 [NASA-CASE-XMS-05562-1] c09 N69-39986
 Automatic control of voltage supply to direct current motor
 [NASA-CASE-XMS-04215-1] c09 N69-39987
 Design, development, and operating principles of power supply with starting circuit which is independent of voltage regulator
 [NASA-CASE-XMS-01991] c09 N71-21449
 High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits

[NASA-CASE-XLE-02008] c09 N71-21583
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 [NASA-CASE-XMS-00913] c10 N71-23543
 Voltage controlled, variable frequency relaxation oscillator with MOSFET variable current feed
 [NASA-CASE-GSC-10022-1] c10 N71-25882
 Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage
 [NASA-CASE-GSC-10735-1] c10 N71-26085
 Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
 [NASA-CASE-XMS-06497] c14 N71-26244
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 [NASA-CASE-GSC-10891-1] c10 N71-26626
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 [NASA-CASE-GSC-10376-1] c14 N71-27407
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 [NASA-CASE-NPO-11253] c09 N72-17157
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 [NASA-CASE-LEW-11005-1] c09 N72-21243
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 [NASA-CASE-ERC-10268] c09 N72-25252
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 [NASA-CASE-HQN-10792-1] c09 N74-11049
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 [NASA-CASE-MFS-21671-1] c10 N74-22885
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 [NASA-CASE-KSC-10736-1] c33 N75-19521
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 Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
 [NASA-CASE-XMS-09652-1] c05 N71-26333
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 [NASA-CASE-LAR-11645-1] c02 N74-26456
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 [NASA-CASE-XNP-04709] c15 N71-15609
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W

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 [NASA-CASE-GSC-11619-1] c34 N75-12222
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 [NASA-CASE-XLE-00164] c15 N70-36411

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[NASA-CASE-XMS-10984-1] c10 N71-19417

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[NASA-CASE-ERC-10125] c09 N71-24893

Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-XMP-03968] c14 N71-27186

Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375

Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244

Development and operating principles of collision warning system for aircraft accident prevention
[NASA-CASE-HQN-10703] c21 N73-13643

Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483

Silent alarm system for multiple room facility or school
[NASA-CASE-NPO-11307-1] c10 N73-30205

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[NASA-CASE-LAR-10717-1] c21 N73-30641

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[NASA-CASE-NPO-13160-1] c14 N74-18090

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[NASA-CASE-XMS-06761] c05 N69-23192

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[NASA-CASE-HPS-20922] c31 N72-20840

Pressurized tank for feeding liquid waste into processing equipment
[NASA-CASE-LAR-10365-1] c05 N72-27102

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[NASA-CASE-HPS-22102-1] c05 N74-20725

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Raw liquid waste treatment system and process
[NASA-CASE-NPO-13573-1] c05 N74-32552

Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611

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Variable water load for dissipating large amounts of electrical power during high voltage power supply tests
[NASA-CASE-XNP-05381] c09 N71-20842

Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094

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Potable water dispenser
[NASA-CASE-HPS-21115-1] c05 N74-12779

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Reentry communication by injection of water droplets into plasma layer surrounding space vehicle
[NASA-CASE-XLA-01552] c07 N71-11284

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Parachute system for lowering manned spacecraft from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009

Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-HSC-13281] c31 N72-18859

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Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-HSC-10960-1] c03 N71-24718

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Portable tester for monitoring bacterial contamination by adenosine triphosphate light reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413

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Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-HSC-10960-1] c03 N71-24718

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[NASA-CASE-NPO-13224-1] c05 N73-31011

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[NASA-CASE-NPO-13573-1] c05 N74-32552

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[NASA-CASE-ARC-10643-1] c25 N75-12087

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[NASA-CASE-ARC-10643-2] c51 N75-13506

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[NASA-CASE-XMS-01618] c14 N71-20741

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[NASA-CASE-LEW-10698-1] c15 N74-21063

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[NASA-CASE-ERC-10017] c16 N71-15567

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[NASA-CASE-XLA-00112] c11 N70-33287

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[NASA-CASE-XMS-01315] c09 N70-41675

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[NASA-CASE-NPO-10251] c10 N71-27365

Wideband generator for producing sine wave quadrature and second harmonic of input signal
[NASA-CASE-NPO-11133] c10 N72-20223

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[NASA-CASE-NPO-13263-1] c15 N73-31443

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Surface defect detection by reflected microwave radiation pattern
[NASA-CASE-ARC-10009-1] c15 N71-17822

Millimeter wave antenna system for spacecraft use
[NASA-CASE-GSC-10949-1] c07 N71-28965

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[NASA-CASE-HPS-20243] c23 N73-13662

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[NASA-CASE-IGS-00431] c09 N70-38995

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[NASA-CASE-XNP-01383] c09 N71-10659

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[NASA-CASE-FRC-10010] c10 N71-24862

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[NASA-CASE-HSC-12395] c09 N72-25257

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[NASA-CASE-LAR-11379-1] c07 N74-11005

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[NASA-CASE-NPO-10301] c07 N72-11148
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[NASA-CASE-LAR-11084-1] c09 N73-12216

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Microwave power divider for providing variable output power to output waveguide in fixed waveguide system
[NASA-CASE-NPO-11031] c07 N71-33606
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[NASA-CASE-NPO-13506-1] c09 N74-27690

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[NASA-CASE-XNP-08880] c09 N71-24808

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[NASA-CASE-XNP-03134] c07 N71-10676
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[NASA-CASE-XNP-05219] c16 N71-15550
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[NASA-CASE-ERC-10011] c07 N71-29065
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[NASA-CASE-ERC-10179] c07 N72-20141
Waveguide, thin film window and microwave irises
[NASA-CASE-LAR-10513-1] c07 N72-25170
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[NASA-CASE-LAR-10511-1] c09 N72-29172
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[NASA-CASE-LAR-11352-1] c09 N74-19854
Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NPO-13544-1] c36 N75-15974

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[NASA-CASE-ERC-10187] c16 N69-31343
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[NASA-CASE-XLE-00011] c14 N70-41946
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[NASA-CASE-ARC-10370-1] c16 N72-10432
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[NASA-CASE-ERC-10248] c14 N72-17323
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[NASA-CASE-ERC-10174] c14 N72-25409
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[NASA-CASE-MFS-20675] c26 N73-26751
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[NASA-CASE-ARC-10637-1] c35 N75-16783

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[NASA-CASE-XKS-08485] c07 N71-19493

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[NASA-CASE-LAR-10193-1] c15 N71-27146

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Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c14 N74-26945

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[NASA-CASE-XLA-02605] c14 N71-10773

Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c14 N74-26945

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[NASA-CASE-MSC-14653-1] c35 N75-13218

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[NASA-CASE-XMS-01624] c15 N70-40062
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[NASA-CASE-XMS-01546] c14 N70-40233
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[NASA-CASE-XNP-01390] c28 N70-41275
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[NASA-CASE-XMS-01492] c05 N70-41297
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[NASA-CASE-XLA-03213] c05 N71-11207
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[NASA-CASE-XLA-01787] c11 N71-16028
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[NASA-CASE-MFS-12750] c27 N71-16223
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[NASA-CASE-MFS-11132] c15 N71-17649
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[NASA-CASE-XMS-06236] c14 N71-21007
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[NASA-CASE-XNP-06515] c14 N71-23227
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[NASA-CASE-ARC-10100-1] c05 N71-24738
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[NASA-CASE-XNP-09770-3] c11 N71-27036
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[NASA-CASE-MFS-14405] c15 N72-28495
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[NASA-CASE-LAR-10195-1] c15 N73-19458
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[NASA-CASE-KSC-10626] c14 N73-27378
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[NASA-CASE-LAR-11110-1] c12 N74-29652

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Harness assembly adapted to support man on ground based apparatus which simulates weightlessness
[NASA-CASE-MPS-14671] c05 N71-12341

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[NASA-CASE-MSC-13972-1] c05 N74-10975

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[NASA-CASE-MSC-19372-1] c37 N75-11351
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WELDED STRUCTURES
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[NASA-CASE-MPS-12827] c14 N71-17656
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[NASA-CASE-XLA-02810] c14 N71-25901
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[NASA-CASE-NPO-11304] c14 N73-26430

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[NASA-CASE-XLE-00228] c17 N70-38490
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[NASA-CASE-MSC-12052-1] c15 N71-24599

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[NASA-CASE-NPO-13462-1] c35 N75-16807

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[NASA-CASE-IXP-14032] c20 N71-16340
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[NASA-CASE-MPS-20916] c14 N73-25460
Wind sensor --- remote measurement of wind velocity, temperature, and direction
[NASA-CASE-NPO-13462-1] c35 N75-16807

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[NASA-CASE-XLA-02081] c20 N71-16281

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[NASA-CASE-IAC-00319] c25 N70-41628
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[NASA-CASE-XLA-00939] c11 N71-15926
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[NASA-CASE-MPS-12915] c11 N71-17600
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[NASA-CASE-XAC-01677] c09 N71-20816
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WIND TUNNELS

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WIND TUNNELS

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[NASA-CASE-XLA-02081] c20 N71-16281

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[NASA-CASE-LAR-10513-1] c07 N72-25170

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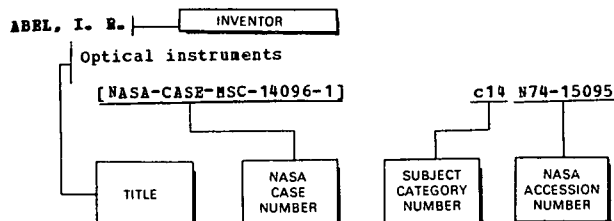
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GOODYER, E. J.
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[NASA-CASE-LAR-11139-1] c14 N74-32878

GORDON, W. A.
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[NASA-CASE-XLE-04788] c09 N71-22987

GORELICK, D.
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566

GORSTEIN, E.
Two color horizon sensor
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GOSB, W. C.
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[NASA-CASE-NPO-11426] c07 N73-26119

GOUDY, J. R.
Capacitor power pak Patent Application
[NASA-CASE-LAR-10367-1] c03 N70-26817

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GOULD, J. M.
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[NASA-CASE-INP-00663] c08 N71-18752
Acquisition and tracking system for optical radar
[NASA-CASE-HFS-20125] c16 N72-13437

GOULD, W. L., JR.
Millimeter wave antenna system Patent Application
[NASA-CASE-GSC-10949-1] c07 N71-28965

GRAAB, J. E.
Analytical test apparatus and method for determining oxide content of alkali metal Patent
[NASA-CASE-XLE-01997] c06 N71-23527

GRABOWSKI, J. P.
Target acquisition antenna
[NASA-CASE-GSC-10364-1] c10 N72-22235

GRAFF, J.
Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844

GRAFSTEIN, D.
Fluidic-thermochromic display device Patent
[NASA-CASE-ERC-10031] c12 N71-18603

GRAHAM, O. L.
Color television system
[NASA-CASE-HSC-12146-1] c07 N72-17109

GRAHAM, R. W.
Liquid storage tank venting device for zero gravity environment Patent
[NASA-CASE-XLE-01449] c15 N70-41646

GRAN, A. A.
Venting device for pressurized space suit helmet Patent
[NASA-CASE-XMS-09652-1] c05 N71-26333

GRANATA, R. L.
Sidereal frequency generator Patent
[NASA-CASE-XGS-02610] c14 N71-23174

GRANT, D. J.
Passively regulated water electrolysis rocket engine Patent
[NASA-CASE-XGS-08729] c28 N71-14044
Precision thrust gage Patent
[NASA-CASE-XGS-02319] c14 N71-22965
Fluid flow meter with comparator reference means Patent
[NASA-CASE-XGS-01331] c14 N71-22996

GRANT, G. R.
Dual wavelength scanning Doppler velocimeter
[NASA-CASE-ARC-10637-1] c35 N75-16783

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[NASA-CASE-GSC-10890-1] c21 N73-30640

GRANTHAM, W. L.
Means for measuring the electron density gradients of the plasma sheath formed around a space vehicle Patent
[NASA-CASE-XLA-06232] c25 N71-20563
Antenna design for surface wave suppression Patent
[NASA-CASE-XLA-10772] c07 N71-28980

GRAY, C. E.
Optical characteristics measuring apparatus Patent
[NASA-CASE-INP-08840] c23 N71-16365

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Three-axis adjustable loading structure
[NASA-CASE-ERC-10051-1] c14 N74-13129

GRAY, J. L.
Automatic lightning detection and photographic system
[NASA-CASE-KSC-10728-1] c14 N73-32319

GRAY, V. H.
Boiler for generating high quality vapor Patent
[NASA-CASE-XLE-00785] c33 N71-16104
Ablative system
[NASA-CASE-LEW-10359] c33 N72-25911
Ablative system
[NASA-CASE-LEW-10359-2] c33 N73-25952
Space vehicle with artificial gravity and earth-like environment
[NASA-CASE-LEW-11401-1] c31 N73-32750

GRAYSON, J. H.
Voltage-current characteristic simulator Patent

[NASA-CASE-XMS-01554]	c10 N71-10578	[NASA-CASE-XLE-01604-2]	c15 N71-15610
GREBE, W. J.		Nickel aluminide coated low alloy stainless steel	
Inductive liquid level detection system Patent		[NASA-CASE-LEW-11267-1]	c17 N73-32414
[NASA-CASE-XLE-01609]	c14 N71-10500	Coating superalloys	
GREEN, F. J.		[NASA-CASE-LEW-11696-3]	c17 N74-27963
Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system		Method of protecting the surface of a substrate	
[NASA-CASE-MSC-14245-1]	c31 N73-30832	[NASA-CASE-LEW-11696-1]	c37 N75-13261
GREEN, E. D.		Duplex aluminized coatings	
Linear sawtooth voltage-wave generator employing transistor timing circuit having capacitor-zener diode combination feedback		[NASA-CASE-LEW-11696-2]	c26 N75-19408
Patent		GROBMAN, J.	
[NASA-CASE-XMS-01315]	c09 N70-41675	Electric propulsion engine test chamber Patent	
GREEN, K. A.		[NASA-CASE-XLE-00252]	c11 N70-34844
Highly efficient antenna system using a corrugated horn and scanning hyperboloid reflector		GROOM, W. J.	
[NASA-CASE-NPO-13568-1]	c33 N75-14964	Electromagnetic mirror drive system	
GREEN, R. G.		[NASA-CASE-XLA-03724]	c14 N69-27461
Traversing probe Patent		Variable pulse width multiplier Patent	
[NASA-CASE-XPR-02007]	c12 N71-24692	[NASA-CASE-XLA-02850]	c09 N71-20447
Layout tool Patent		Annular momentum control device used for stabilization of space vehicles and the like	
[NASA-CASE-PRC-10005]	c15 N71-26145	[NASA-CASE-LAR-11051-1]	c21 N73-28646
Method and apparatus for attaching physiological monitoring electrodes Patent		GROSE, W. L.	
[NASA-CASE-XPR-07658-1]	c05 N71-26293	Combustion detector	
GREEN, R. R.		[NASA-CASE-LAR-10739-1]	c14 N73-16484
Serial digital decoder Patent		GROSS, C.	
[NASA-CASE-NPO-10150]	c08 N71-24650	Method of temperature compensating semiconductor strain gages Patent	
Apparatus for deriving synchronizing pulses from pulses in a single channel PCM communications system		[NASA-CASE-XLA-04555-1]	c14 N71-25892
[NASA-CASE-NPO-11302-1]	c07 N73-13149	Infrared detectors	
Method and apparatus for a single channel digital communications system		[NASA-CASE-LAR-10728-1]	c14 N73-12445
[NASA-CASE-NPO-11302-2]	c07 N74-10132	GROSS, W. J.	
GREEN, W. L.		Method of fabricating an object with a thin wall having a precisely shaped slit	
Mass measuring system Patent		[NASA-CASE-LAR-10409-1]	c15 N74-21059
[NASA-CASE-XMS-03371]	c05 N70-42000	GROTH, W. G.	
GREENBERG, J.		Optical inspection apparatus Patent	
Combined electrolysis device and fuel cell and method of operation Patent		[NASA-CASE-XMF-00462]	c14 N70-34298
[NASA-CASE-XLE-01645]	c03 N71-20904	GRUBBS, T. M.	
Heat activated cell with alkali anode and alkali salt electrolyte Patent		Discrete local altitude sensing device Patent	
[NASA-CASE-LEW-11358]	c03 N71-26084	[NASA-CASE-XMS-03792]	c14 N70-41812
Heat activated cell Patent		Line cutter Patent	
[NASA-CASE-LEW-11359]	c03 N71-28579	[NASA-CASE-XMS-04072]	c15 N70-42017
Method of making enf cell		Tension measurement device Patent	
[NASA-CASE-LEW-11359-2]	c03 N72-20034	[NASA-CASE-XMS-04545]	c15 N71-22878
GREENWOOD, T. L.		Winch having cable position and load indicators Patent	
Seismic displacement transducer Patent		[NASA-CASE-MSC-12052-1]	c15 N71-24599
[NASA-CASE-XMF-00479]	c14 N70-34794	GRUBER, C. L.	
Condition and condition duration indicator Patent		Method and apparatus for optical modulating a light signal Patent	
[NASA-CASE-XMF-01097]	c10 N71-16058	[NASA-CASE-GSC-10216-1]	c23 N71-26722
GREGORY, J. W.		GRUNTHANER, F. J.	
Rocket motor system Patent		Soft X-ray laser using crystal channels as distributed feedback cavities	
[NASA-CASE-XLE-00323]	c28 N70-38505	[NASA-CASE-NPO-13532-1]	c36 N75-15973
Combustion chamber Patent		GUILLLOTTE, R. J.	
[NASA-CASE-XLE-04857]	c28 N71-23968	Infrared scanner Patent	
Rocket thrust throttling system		[NASA-CASE-XLA-00120]	c21 N70-33181
[NASA-CASE-LEW-10374-1]	c28 N73-13773	GUISINGER, J. E.	
GRIEVE, S. M.		Starting circuit for vapor lamps and the like Patent	
Apparatus for testing wiring harness by vibration generating means		[NASA-CASE-XNP-01058]	c09 N71-12540
[NASA-CASE-MSC-15158-1]	c14 N72-17325	Variable frequency nuclear magnetic resonance spectrometer Patent	
GRIFPIN, F. D.		[NASA-CASE-XNP-09830]	c14 N71-26266
Device for determining the accuracy of the flare on a flared tube		High voltage transistor amplifier with constant current load	
[NASA-CASE-XKS-03495]	c14 N69-39785	[NASA-CASE-NPO-11023]	c09 N72-17155
Optical monitor panel Patent		Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control	
[NASA-CASE-XKS-03509]	c14 N71-23175	[NASA-CASE-NPO-11317-2]	c16 N74-13205
GRIFPIN, R. E.		GUIST, L. R.	
Apparatus for conducting flow electrophoresis in the substantial absence of gravity		Solid medium thermal engine	
[NASA-CASE-MPS-21394-1]	c12 N74-27744	[NASA-CASE-ARC-10461-1]	c33 N74-33379
GRIFPIN, W. S.		GUNGLE, R. L.	
Fluid jet amplifier		Self-sealing, unbonded, rocket motor nozzle closure Patent	
[NASA-CASE-XLE-03512]	c12 N69-21466	[NASA-CASE-XLA-02651]	c28 N70-41967
Fluid jet amplifier Patent		GUNTER, W. D., JR.	
[NASA-CASE-XLE-09341]	c12 N71-28741	Dual wavelength scanning Doppler velocimeter	
GRIFPITH, G. E.		[NASA-CASE-ARC-10637-1]	c35 N75-16783
High intensity heat and light unit Patent		GUTTLER, C. A.	
[NASA-CASE-XLA-00141]	c09 N70-33312	Ablation sensor	
GRISAPPE, S. J.		[NASA-CASE-XLA-01781]	c14 N69-39975
Method of making a diffusion bonded refractory coating Patent		Pressurized cell micrometeoroid detector Patent	
		[NASA-CASE-XLA-00936]	c14 N71-14996
		Dual measurement ablation sensor	
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[NASA-CASE-NPO-10344] c10 N71-26544
System for quantizing graphic displays
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[NASA-CASE-XMP-04958-1] c10 N71-26414

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[NASA-CASE-NPO-11749] c14 N73-28486

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[NASA-CASE-ARC-10345-1] c15 N73-12488

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[NASA-CASE-LAR-11027-1] c14 N74-18088

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[NASA-CASE-LEW-11274-1] c15 N73-29457

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[NASA-CASE-GSC-11163-1] c15 N73-32360

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Frequency to analog converter Patent
[NASA-CASE-XNP-07040] c08 N71-12500

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[NASA-CASE-LAR-10310-1] c10 N73-20253

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[NASA-CASE-ARC-10329-1] c05 N73-26072
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[NASA-CASE-XLA-00203] c14 N70-34161
Liquid waste feed system
[NASA-CASE-LAR-10365-1] c05 N72-27102

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[NASA-CASE-RQN-10781] c23 N71-30292

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[NASA-CASE-XGS-10010] c03 N72-15986

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[NASA-CASE-MPS-21660-1] c14 N74-21017
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[NASA-CASE-MPS-21698-1] c09 N74-26732

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[NASA-CASE-NPO-13044-1] c14 N74-15094

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[NASA-CASE-XLA-09122] c15 N69-27505

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[NASA-CASE-XNP-07477] c09 N71-26092
Event sequence detector
[NASA-CASE-NPO-11703-1] c10 N73-32144
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[NASA-CASE-XLE-04503] c14 N71-24864
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[NASA-CASE-XLE-04791] c14 N74-22096

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[NASA-CASE-XLE-00702] c14 N70-40203
Method of making screen by casting Patent
[NASA-CASE-XLE-00953] c15 N71-15966
Fluid flow control valve Patent
[NASA-CASE-XLE-00703] c15 N71-15967
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[NASA-CASE-XLE-00155] c28 N71-29154

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[NASA-CASE-LAR-10348-1] c11 N73-12264

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[NASA-CASE-XNP-05634] c15 N71-24834
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[NASA-CASE-XLE-05641-1] c15 N71-26346

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 Technique for bonding
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 [NASA-CASE-ERC-10248] c14 N72-17323
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 [NASA-CASE-ARC-10134] c30 N72-17873
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 [NASA-CASE-XLA-00492] c14 N70-34799
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 [NASA-CASE-XLA-10402] c74 N71-29041
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[NASA-CASE-XMS-02184]	c15 N71-20813	Patent	
Circuit board package with wedge shaped covers		[NASA-CASE-XLA-03645]	c14 N71-20430
[NASA-CASE-MPS-21919-1]	c10 N73-25243	Solid state thermal control polymer coating	
PESHAN, G. J.		Patent	
Shock absorbing support and restraint means Patent		[NASA-CASE-XLA-01745]	c33 N71-28903
[NASA-CASE-XMS-01240]	c05 N70-35152	PFAPP, E.	
PETERS, D. A.		Swivel support for gas bearings Patent	
Hingeless helicopter rotor with improved stability		[NASA-CASE-XNP-07808]	c15 N71-23812
[NASA-CASE-ARC-10807-1]	c02 N74-34475	PPIPFNER, H. J.	
PETERS, H. E.		Bootstrap unloader Patent	
Atomic standard with variable storage volume		[NASA-CASE-XNP-09768]	c09 N71-12516
[NASA-CASE-GSC-11895-1]	c15 N74-33997	PFLEGER, R. O.	
PETERS, L., JR.		Spherical shield Patent	
Horn antenna having V-shaped corrugated slots		[NASA-CASE-XNP-01855]	c15 N71-28937
[NASA-CASE-LAR-11112-1]	c09 N74-29575	PHILIPP, W. H.	
PETERS, R. L.		Selective nickel deposition	
CRT blanking and brightness control circuit		[NASA-CASE-LEW-10965-1]	c15 N72-25452
[NASA-CASE-KSC-10647-1]	c10 N72-31273	Production of pure metals	
PETERS, R. W.		[NASA-CASE-LEW-10906-1]	c06 N74-30502
Two component bearing Patent		Process for making anhydrous metal halides	
[NASA-CASE-XLA-00013]	c15 N71-29136	[NASA-CASE-LEW-11860-1]	c25 N75-13053
PETERSEN, H. L.		PHILIPS, A. R.	
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[NASA-CASE-MSC-14180-1]	c05 N73-22045	[NASA-CASE-XLA-07829]	c15 N72-16329
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PETERSEN, H. W.		[NASA-CASE-XLA-02705]	c08 N71-15908
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[NASA-CASE-XNP-08907]	c23 N71-29123	Method of forming a wick for a heat pipe	
PETERSON, E. W.		[NASA-CASE-NPO-13391-1]	c33 N74-19584
Canopus detector including automotive gain		PHILLIPS, W. H.	
control of photomultiplier tube Patent		Variable-geometry winged reentry vehicle Patent	
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[NASA-CASE-XMS-09632-1]	c05 N71-11203	Cermet composition and method of fabrication	
PETERSON, S. T.		[NASA-CASE-NPO-13120-1]	c18 N73-23629
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		STUDENICK, D. K.	
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and field Patent
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channel recording on both sides of the tape
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[NASA-CASE-NPO-10768] c06 N71-27254
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[NASA-CASE-NPO-10765] c06 N72-20121
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perfluoro ethers
[NASA-CASE-NPO-10768-2] c06 N72-27144
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[NASA-CASE-MSC-13601-1] c05 N72-11088
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[NASA-CASE-XLE-03804] c10 N71-19471

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[NASA-CASE-XGS-04808] c03 N69-25146
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with blocking oscillator feedback Patent
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[NASA-CASE-GSC-11188-2] c21 N73-19630
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converter and scaler
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electrodes
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[NASA-CASE-HQM-10541-1]	c07 N71-26291	Optical system support apparatus	
Laser machining apparatus Patent		[NASA-CASE-XER-07896-2]	c23 N72-22673
[NASA-CASE-HQM-10541-2]	c15 N71-27435	TSUDA, G. I.	
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[NASA-CASE-HQM-10541-4]	c16 N71-27183	[NASA-CASE-GSC-11317-3]	c09 N74-20863
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[NASA-CASE-HQM-10541-3]	c23 N72-23695	Hydraulic drive mechanism Patent	
TOWSEND, M. R.		[NASA-CASE-XMS-03252]	c15 N71-10658
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New polymers of perfluorobutadiene and method of manufacture Patent application		TUCKER, E. M.	
[NASA-CASE-NPO-10863]	c06 N70-11251	Coupling device	
Method of polymerizing perfluorobutadiene Patent application		[NASA-CASE-XMS-07846-1]	c09 N69-21927
[NASA-CASE-NPO-10447]	c06 N70-11252	Space suit heat exchanger Patent	
Utilization of oxygen difluoride for syntheses of fluoropolymers		[NASA-CASE-XMS-09571]	c05 N71-19439
[NASA-CASE-NPO-12061-1]	c06 N72-21100	Extravehicular tunnel suit system Patent	
Reaction of fluorine with polyperfluoropolyenes		[NASA-CASE-MSC-12243-1]	c05 N71-24778
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[NASA-CASE-XMS-04798]	c11 N71-21474	[NASA-CASE-LAR-10365-1]	c05 N72-27102
Pneumatic amplifier Patent		TURK, R. E.	
[NASA-CASE-MSC-12121-1]	c15 N71-27147	Fabrication of controlled-porosity metals Patent	
TRAVIS, E. W.		[NASA-CASE-XNP-04339]	c17 N71-29137
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[NASA-CASE-XGS-02554]	c31 N71-21064	Flame detector operable in presence of proton radiation	
TRELEASE, R. B.		[NASA-CASE-MFS-21577-1]	c03 N74-29410
Hydraulic casting of liquid polymers Patent		TURNER, J. W.	
[NASA-CASE-XNP-07659]	c06 N71-22975	Measurement system	
TRENT, R. C.		[NASA-CASE-MFS-20658-1]	c14 N73-30386
Method of manufacturing semiconductor devices using refractory dielectrics		TURNER, R. C.	
[NASA-CASE-XER-08476-1]	c26 N72-17820	Thermocouple assembly Patent	
TRENT, R. L.		[NASA-CASE-XNP-01659]	c14 N71-23039
Location identification system		TURNER, R. E.	
[NASA-CASE-ERC-10324]	c07 N72-25173	Anemometer with braking mechanism Patent	
TRINPI, R. L.		[NASA-CASE-XNP-05224]	c14 N71-23726
Combustion detector		Maxometers (peak wind speed anemometers)	
[NASA-CASE-LAR-10739-1]	c14 N73-16484	[NASA-CASE-MFS-20916]	c14 N73-25460
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[NASA-CASE-MFS-10512]	c06 N73-30099	[NASA-CASE-LAR-10127-1]	c14 N74-18088
Polyurethanes from fluoroalkyl propyleneglycol polyethers		Vapor phase growth of groups III-V compounds by hydrogen chloride transport of the elements	
[NASA-CASE-MFS-10506]	c06 N73-30100	[NASA-CASE-LAR-11144-1]	c26 N74-27261
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[NASA-CASE-MFS-10507]	c06 N73-30101	Apparatus for simulating optical transmission links	
Highly fluorinated polymers		[NASA-CASE-GSC-11877-1]	c07 N74-30532
[NASA-CASE-MFS-11492]	c06 N73-30102	TYLER, A. L.	
Fluorine containing polyurethane		Helical recorder arrangement for multiple channel recording on both sides of the tape	
[NASA-CASE-MFS-10509]	c06 N73-30103	[NASA-CASE-GSC-10614-1]	c09 N72-11224
TROST, R. F.		System for stabilizing torque between a balloon and gondola	
Data compression system with a minimum time delay unit Patent		[NASA-CASE-GSC-11077-1]	c02 N73-13008
[NASA-CASE-XNP-08832]	c08 N71-12506	UBER, P. W.	
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Heat protection apparatus Patent		[NASA-CASE-XGS-08259]	c14 N71-23698
[NASA-CASE-XLA-00892]	c33 N71-17897	ULRICH, B. R.	
TRUBERT, M. R.		Aircraft mounted crash activated transmitter device	
Collapsible structure for an antenna reflector		[NASA-CASE-MFS-16609-3]	c09 N74-34647
[NASA-CASE-NPO-11751]	c07 N73-24176	ULRICH, D. R.	
TRUSCH, R. B.		Screened circuit capacitors	
Condensate removal device for heat exchanger		[NASA-CASE-LAR-10294-1]	c26 N72-28762
[NASA-CASE-MSC-14143-1]	c77 N75-20139	ULRICH, G. W.	
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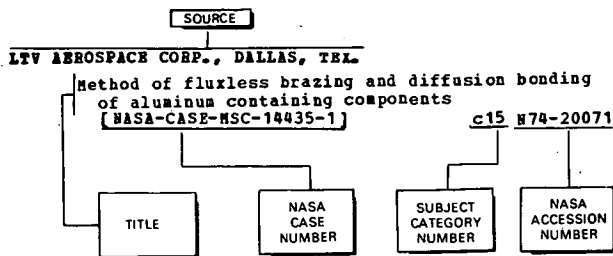
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Section 2

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[NASA-CASE-XLE-00815] c15 N70-35407

Thrust dynamometer Patent
[NASA-CASE-XLE-00702] c14 N70-40203

Solid state chemical source for ammonia beam maser Patent
[NASA-CASE-XGS-01504] c16 N70-41578

Canopus detector including automotive gain control of photomultiplier tube Patent
[NASA-CASE-XNP-03914] c21 N71-10771

Horn feed having overlapping apertures Patent
[NASA-CASE-GSC-10452] c07 N71-12396

Deflective rod switch with elastic support and sealing means Patent
[NASA-CASE-XNP-09808] c09 N71-12518

Guidance and maneuver analyzer Patent
[NASA-CASE-XNP-09572] c14 N71-15621

Method of making screen by casting Patent
[NASA-CASE-XLE-00953] c15 N71-15966

Fluid flow control valve Patent
[NASA-CASE-XLE-00703] c15 N71-15967

Low noise single aperture multimode monopulse antenna feed system Patent
[NASA-CASE-XNP-01735] c07 N71-22750

Multilayer porous ionizer Patent
[NASA-CASE-XNP-04338] c17 N71-23046

Construction and method of arranging a plurality of ion engines to form a cluster Patent
[NASA-CASE-XNP-02923] c28 N71-23081

Method for fiberizing ceramic materials Patent
[NASA-CASE-XNP-00597] c18 N71-23088

Inorganic thermal control pigment Patent
[NASA-CASE-XNP-02139] c18 N71-24184

Triaxial antenna Patent
[NASA-CASE-XGS-02290] c07 N71-28809

Variable frequency oscillator with temperature compensation Patent
[NASA-CASE-XNP-03916] c09 N71-28810

High efficiency ionizer assembly Patent
[NASA-CASE-XNP-01954] c28 N71-28850

Apparatus for changing the orientation and velocity of a spinning body traversing a path Patent
[NASA-CASE-HQN-00936] c31 N71-29050

Fabrication of controlled-porosity metals Patent
[NASA-CASE-XNP-04339] c17 N71-29137

Ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770

HUGHES AIRCRAFT CO., LOS ANGELES, CALIF.
Power control circuit
[NASA-CASE-XNP-02713] c10 N69-39888

Thermal switch Patent
[NASA-CASE-XNP-00463] c33 N70-36847

Double optic system for ion engine Patent
[NASA-CASE-XNP-02839] c28 N70-41922

Sample collecting impact bit Patent
[NASA-CASE-XNP-01412] c15 N70-42034

Bootstrap unloader Patent
[NASA-CASE-XNP-09768] c09 N71-12516

Difference circuit Patent
[NASA-CASE-XNP-08274] c10 N71-13537

Gas regulator Patent
[NASA-CASE-NPO-10298] c12 N71-17661

A dc-coupled noninverting one-shot Patent
[NASA-CASE-XNP-09450] c10 N71-18723

Phase demodulation system with two phase locked loops Patent
[NASA-CASE-XNP-00777] c10 N71-19469

High voltage transistor circuit Patent
[NASA-CASE-XNP-06937] c09 N71-19516

Drift compensation circuit for analog to digital converter Patent
[NASA-CASE-XNP-04780] c08 N71-19687

System for monitoring the presence of neutrals in a stream of ions Patent
[NASA-CASE-XNP-02592] c24 N71-20518

Broadband frequency discriminator Patent
[NASA-CASE-NPO-10096] c07 N71-24583

Flexible, repairable, portable material for electrical connectors Patent
[NASA-CASE-XGS-05180] c18 N71-25881

Phase multiplying electronic scanning system Patent
[NASA-CASE-NPO-10302] c10 N71-26142

Narrow bandwidth video Patent
[NASA-CASE-XMS-06740-1] c07 N71-26579

Solar panel fabrication Patent
[NASA-CASE-XNP-03413] c03 N71-26726

Method for removing oxygen impurities from cesium Patent
[NASA-CASE-XNP-04262-2] c17 N71-26773

Virtual wall slot circularly polarized planar array antenna
[NASA-CASE-NPO-10301] c07 N72-11148

Conical reflector antenna
[NASA-CASE-NPO-10303] c07 N72-22127

Injector for use in high voltage isolators for liquid feed lines
[NASA-CASE-NPO-11377] c15 N73-27406

High efficiency multifrequency feed
[NASA-CASE-GSC-11317-3] c09 N74-20863

Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MPS-22411-1] c15 N74-21058

Method and apparatus for optically monitoring the angular position of a rotating mirror

[NASA-CASE-GSC-11353-1] c23 N74-21304
 HUGHES RESEARCH LABS., MALIBU, CALIF.
 Thrust dynamometer Patent
 [NASA-CASE-XLE-05260] c14 N71-20429

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Spectral method for monitoring atmospheric
 contamination of inert-gas welding shields
 Patent
 [NASA-CASE-XMP-02039] c15 N71-15871
 Lightweight refractory insulation and method of
 preparing the same Patent
 [NASA-CASE-XMP-05279] c18 N71-16124
 Stabilized zinc oxide coating compositions Patent
 [NASA-CASE-XMP-07770-2] c18 N71-26772
 Synthesis of zinc titanate pigment and coatings
 containing the same
 [NASA-CASE-MPS-13532] c18 N72-17532
 Junction range finder
 [NASA-CASE-KSC-10108] c14 N73-25461

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 [NASA-CASE-GSC-11553-1] c07 N74-15831

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Apparatus for establishing flow of a fluid mass
 having a known velocity
 [NASA-CASE-MPS-21424-1] c12 N74-27730

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Method of making a perspiration resistant
 biopotential electrode
 [NASA-CASE-MSC-90153-2] c05 N72-25120

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Pressed disc type sensing electrodes with ion-
 screening means Patent
 [NASA-CASE-XMS-04212-1] c05 N71-12346

INTERNATIONAL BUSINESS MACHINES CORP., NEW YORK.

Electrical connector pin with wiping action
 [NASA-CASE-XMP-04238] c09 N69-39734

Tool attachment for spreading loose elements
 away from work Patent
 [NASA-CASE-XMP-02107] c15 N71-10809

Redundant memory organization Patent
 [NASA-CASE-GSC-10564] c10 N71-29135

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Silicide coatings for refractory metals Patent
 [NASA-CASE-XLE-10910] c18 N71-29040

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 [NASA-CASE-MSC-12609-1] c05 N73-32012

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Time division radio relay synchronizing system
 using different sync code words for in sync
 and out of sync conditions Patent
 [NASA-CASE-GSC-10373-1] c07 N71-19773

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 [NASA-CASE-IGS-08679] c10 N71-21473

Satellite interlace synchronization system
 [NASA-CASE-GSC-10390-1] c07 N72-11149

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 [NASA-CASE-XNP-09752] c14 N69-21541

Rock drill for recovering samples
 [NASA-CASE-XNP-07478] c14 N69-21923

Data compression system
 [NASA-CASE-XNP-09785] c08 N69-21928

Magnetohydrodynamic induction machine
 [NASA-CASE-XNP-07481] c25 N69-21929

Electromechanical actuator
 [NASA-CASE-XNP-05975] c15 N69-23185

Refrigeration apparatus
 [NASA-CASE-NPO-10309] c15 N69-23190

Direct radiation cooling of the collector of
 linear beam tubes
 [NASA-CASE-XNP-09227] c15 N69-24319

Excitation and detection circuitry for a flux
 responsive magnetic head
 [NASA-CASE-XNP-04183] c09 N69-24329

Telemetry word forming unit
 [NASA-CASE-XNP-09225] c09 N69-24333

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 [NASA-CASE-XNP-09228] c09 N69-27500

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 [NASA-CASE-XNP-09452] c15 N69-27504

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 [NASA-CASE-NPO-10714] c06 N69-31244

Plurality of photosensitive cells on a
 pyramidal base for planetary trackers
 [NASA-CASE-XNP-04180] c07 N69-39736

Coating process
 [NASA-CASE-XNP-06508] c18 N69-39895

Bi-metallic power controlled actuator
 [NASA-CASE-XNP-09776] c09 N69-39929

Piping arrangement through a double chamber
 structure
 [NASA-CASE-XNP-08882] c15 N69-39935

Micropacked column for a chromatographic system
 [NASA-CASE-XNP-04816] c06 N69-39936

Temperature sensitive capacitor device
 [NASA-CASE-XNP-09750] c14 N69-39937

Thermionic tantalum emitter doped with oxygen
 Patent Application
 [NASA-CASE-NPO-11138] c03 N70-34646

Data handling system based on source
 significance, storage availability and data
 received from the source Patent Application
 [NASA-CASE-XNP-04162-1] c08 N70-34675

Electro-optical scanning apparatus Patent
 Application
 [NASA-CASE-NPO-11106] c14 N70-34697

Liquid junction and method of fabricating the
 same Patent Application
 [NASA-CASE-NPO-10682] c15 N70-34699

Helium refining by superfluidity Patent
 [NASA-CASE-XNP-00733] c06 N70-34946

Means and methods of depositing thin films on
 substrates Patent
 [NASA-CASE-XNP-00595] c15 N70-34967

Photosensitive device to detect bearing
 deviation Patent
 [NASA-CASE-XNP-00438] c21 N70-35089

Antenna beam-shaping apparatus Patent
 [NASA-CASE-XNP-00611] c09 N70-35219

Temperature-compensating means for cavity
 resonator of amplifier Patent
 [NASA-CASE-XNP-00449] c14 N70-35220

Parabolic reflector horn feed with spillover
 correction Patent
 [NASA-CASE-XNP-00540] c09 N70-35382

Means for visually indicating flight paths of
 vehicles between the Earth, Venus, and Mercury
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 [NASA-CASE-XNP-00708] c14 N70-35394

Space vehicle attitude control Patent
 [NASA-CASE-XNP-00465] c21 N70-35395

Binary to binary-coded-decimal converter Patent
 [NASA-CASE-XNP-00432] c08 N70-35423

Cassegrainian antenna subreflector flange for
 suppressing ground noise Patent
 [NASA-CASE-XNP-00683] c09 N70-35425

Ionization vacuum gauge Patent
 [NASA-CASE-XNP-00646] c14 N70-35666

Two-fluid magnetohydrodynamic system and method
 for thermal-electric power conversion Patent
 [NASA-CASE-XNP-00644] c03 N70-36803

Mechanical coordinate converter Patent
 [NASA-CASE-XNP-00614] c14 N70-36907

High pressure four-way valve Patent
 [NASA-CASE-XNP-00214] c15 N70-36908

Liquid rocket system Patent
 [NASA-CASE-XNP-00610] c28 N70-36910

Radar ranging receiver Patent
 [NASA-CASE-XNP-00748] c07 N70-36911

Attitude control for spacecraft Patent
 [NASA-CASE-XNP-00294] c21 N70-36938

Elastic universal joint Patent
 [NASA-CASE-XNP-00416] c15 N70-36947

Apparatus and method for control of a solid
 fueled rocket vehicle Patent
 [NASA-CASE-XNP-00217] c28 N70-38181

Expulsion bladder-equipped storage tank
 structure Patent
 [NASA-CASE-XNP-00612] c11 N70-38182

High-voltage cable Patent
 [NASA-CASE-XNP-00738] c09 N70-38201

Umbilical separator for rockets Patent
 [NASA-CASE-XNP-00425] c11 N70-38202

Multiple Belleville spring assembly Patent
 [NASA-CASE-XNP-00840] c15 N70-38225

Ignition system for monopropellant combustion
 devices Patent
 [NASA-CASE-XNP-00249] c28 N70-38249

Pressure regulating system Patent
[NASA-CASE-XNP-00450] c15 N70-38603

Slit regulated gas journal bearing Patent
[NASA-CASE-XNP-00476] c15 N70-38620

Steerable solid propellant rocket motor Patent
[NASA-CASE-XNP-00234] c28 N70-38645

Space simulator Patent
[NASA-CASE-XNP-00459] c11 N70-38675

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[NASA-CASE-XNP-00676] c15 N70-38996

Time-division multiplexer Patent
[NASA-CASE-XNP-00431] c09 N70-38998

Trajectory-correction propulsion system Patent
[NASA-CASE-XNP-01104] c28 N70-39931

Electrically-operated rotary shutter Patent
[NASA-CASE-XNP-00637] c14 N70-40273

Zero gravity starting means for liquid propellant motors Patent
[NASA-CASE-XNP-01390] c28 N70-41275

Parallel motion suspension device Patent
[NASA-CASE-XNP-01567] c15 N70-41310

Ignition means for monopropellant Patent
[NASA-CASE-XNP-00876] c28 N70-41311

Reinforcing means for diaphragms Patent
[NASA-CASE-XNP-01962] c32 N70-41370

High pressure filter Patent
[NASA-CASE-XNP-00732] c28 N70-41447

Phase-locked loop with sideband rejecting properties Patent
[NASA-CASE-XNP-02723] c07 N70-41680

Digital television camera control system Patent
[NASA-CASE-XNP-01472] c14 N70-41807

Antiflutter ball check valve Patent
[NASA-CASE-XNP-01152] c15 N70-41811

Roll attitude star sensor system Patent
[NASA-CASE-XNP-01307] c21 N70-41856

Process for preparing sterile solid propellants Patent
[NASA-CASE-XNP-01749] c27 N70-41897

Solenoid construction Patent
[NASA-CASE-XNP-01951] c09 N70-41929

Closed loop ranging system Patent
[NASA-CASE-XNP-01501] c21 N70-41930

Printed circuit board with bellows rivet connection Patent
[NASA-CASE-XNP-05082] c15 N70-41960

Phase-shift data transmission system having a pseudo-noise SYNC code modulated with the data in a single channel Patent
[NASA-CASE-XNP-00911] c08 N70-41961

Baseline stabilization system for ionization detector Patent
[NASA-CASE-XNP-03128] c10 N70-41991

Single or joint amplitude distribution analyzer Patent
[NASA-CASE-XNP-01383] c09 N71-10659

Dual waveguide mode source having control means for adjusting the relative amplitude of two modes Patent
[NASA-CASE-XNP-03134] c07 N71-10676

Method for determining the state of charge of batteries by the use of tracers Patent
[NASA-CASE-XNP-01464] c03 N71-10728

High pressure regulator valve Patent
[NASA-CASE-XNP-00710] c15 N71-10778

Solar battery with interconnecting means for plural cells Patent
[NASA-CASE-XNP-06506] c03 N71-11050

Sealed battery gas manifold construction Patent
[NASA-CASE-XNP-03378] c03 N71-11051

Solar cell submodule Patent
[NASA-CASE-XNP-05821] c03 N71-11056

Reflectometer for receiver input impedance match measurement Patent
[NASA-CASE-XNP-10843] c07 N71-11267

Means for generating a sync signal in an FM communication system Patent
[NASA-CASE-XNP-10830] c07 N71-11281

Multi-feed cone Cassegrain antenna Patent
[NASA-CASE-XNP-10539] c07 N71-11285

Thermionic diode switch Patent
[NASA-CASE-XNP-10404] c03 N71-12255

Anti-backlash circuit for hydraulic drive system Patent
[NASA-CASE-XNP-01020] c03 N71-12260

Binary number sorter Patent
[NASA-CASE-XNP-10112] c08 N71-12502

Linear three-tap feedback shift register Patent
[NASA-CASE-XNP-10351] c08 N71-12503

Binary sequence detector Patent
[NASA-CASE-XNP-05415] c08 N71-12505

Data compression system with a minimum time delay unit Patent
[NASA-CASE-XNP-08832] c08 N71-12506

Magnetic counter Patent
[NASA-CASE-XNP-08836] c09 N71-12515

Operational integrator Patent
[NASA-CASE-XNP-10230] c09 N71-12520

Starting circuit for vapor lamps and the like Patent
[NASA-CASE-XNP-01058] c09 N71-12540

Matched thermistors for microwave power meters Patent
[NASA-CASE-XNP-10348] c10 N71-12554

Micro current measuring device using plural logarithmic response heated filamentary type diodes Patent
[NASA-CASE-XNP-00384] c09 N71-13530

Automatic thermal switch Patent
[NASA-CASE-XNP-03796] c23 N71-15467

Photoelectric energy spectrometer Patent
[NASA-CASE-XNP-04161] c14 N71-15599

Anti-glare improvement for optical imaging systems Patent
[NASA-CASE-XNP-10337] c14 N71-15604

Fluid flow restrictor Patent
[NASA-CASE-XNP-10117] c15 N71-15608

High temperature lens construction Patent
[NASA-CASE-XNP-04111] c14 N71-15622

Solder flux which leaves corrosion-resistant coating Patent
[NASA-CASE-XNP-03459-2] c18 N71-15688

Intermittent type silica gel adsorption refrigerator Patent
[NASA-CASE-XNP-00920] c15 N71-15906

Dual mode horn antenna Patent
[NASA-CASE-XNP-01057] c07 N71-15907

Means for controlling rupture of shock tube diaphragm Patent
[NASA-CASE-XNP-00731] c11 N71-15960

Insertion loss measuring apparatus having transformer means connected across a pair of bolometers Patent
[NASA-CASE-XNP-01193] c10 N71-16057

Polarimeter for transient measurement Patent
[NASA-CASE-XNP-08883] c23 N71-16101

Flexible composite membrane Patent
[NASA-CASE-XNP-08837] c18 N71-16210

Mount for thermal control system Patent
[NASA-CASE-XNP-10138] c33 N71-16357

Optical characteristics measuring apparatus Patent
[NASA-CASE-XNP-08840] c23 N71-16365

Parallel plate viscometer Patent
[NASA-CASE-XNP-09462] c14 N71-17584

Means and method of measuring viscoelastic strain Patent
[NASA-CASE-XNP-01153] c32 N71-17645

Interferometer direction sensor Patent
[NASA-CASE-XNP-10320] c14 N71-17655

Interferometer servo system Patent
[NASA-CASE-XNP-10300] c14 N71-17662

Electrical spot terminal assembly Patent
[NASA-CASE-XNP-10034] c15 N71-17685

Sealed separable connection Patent
[NASA-CASE-XNP-10064] c15 N71-17693

Incremental motion drive system Patent
[NASA-CASE-XNP-08897] c15 N71-17694

Microbalance including crystal oscillators for measuring contaminants in a gas system Patent
[NASA-CASE-XNP-10144] c14 N71-17701

Apparatus and method for protecting a photographic device Patent
[NASA-CASE-XNP-10174] c14 N71-18465

Ranging system Patent
[NASA-CASE-XNP-10066] c09 N71-18598

High impact pressure regulator Patent
[NASA-CASE-XNP-10175] c14 N71-18625

Magnetic core current steering commutator Patent
[NASA-CASE-XNP-10201] c08 N71-18694

Method of using photovoltaic cell using poly-N-vinylcarbazole complex Patent
[NASA-CASE-XNP-10373] c03 N71-18698

A dc-coupled noninverting one-shot Patent
[NASA-CASE-XNP-09450] c10 N71-18723

Automatic fault correction system for parallel signal channels Patent
[NASA-CASE-XNP-03263] c09 N71-18843

Data compression processor Patent			Method of resolving clock synchronization error and means therefor Patent	
[NASA-CASE-NPO-10068]	c08	N71-19288	[NASA-CASE-XNP-08875]	c10 N71-23099
Tape guidance system and apparatus for the provision thereof Patent			Impact testing machine Patent	
[NASA-CASE-XNP-09453]	c08	N71-19420	[NASA-CASE-XNP-04817]	c14 N71-23225
High voltage transistor circuit Patent			Zeta potential flowmeter Patent	
[NASA-CASE-XNP-06937]	c09	N71-19516	[NASA-CASE-XNP-06509]	c14 N71-23226
Solar cell matrix Patent			Comparator for the comparison of two binary numbers Patent	
[NASA-CASE-NPO-10821]	c03	N71-19545	[NASA-CASE-XNP-04819]	c08 N71-23295
Electrical switching device Patent			Decontamination of petroleum products Patent	
[NASA-CASE-NPO-10037]	c09	N71-19610	[NASA-CASE-XNP-03835]	c06 N71-23499
Drift compensation circuit for analog to digital converter Patent			Dicyanoacetylene polymers Patent	
[NASA-CASE-XNP-04780]	c08	N71-19687	[NASA-CASE-XNP-03250]	c06 N71-23500
Roll-up solar array Patent			Indexing microwave switch Patent	
[NASA-CASE-NPO-10188]	c03	N71-20273	[NASA-CASE-XNP-06507]	c09 N71-23548
Method and device for determining battery state of charge Patent			Millimeter wave radiometer for radio astronomy Patent	
[NASA-CASE-NPO-10194]	c03	N71-20407	[NASA-CASE-XNP-09832]	c30 N71-23723
Soil particles separator, collector and viewer Patent			Radiant energy intensity measurement system Patent	
[NASA-CASE-XNP-09770]	c15	N71-20440	[NASA-CASE-XNP-06510]	c14 N71-23797
Transmission line thermal short Patent			High speed phase detector Patent	
[NASA-CASE-XNP-09775]	c09	N71-20445	[NASA-CASE-XNP-01306-2]	c09 N71-24596
Synchronous servo loop control system Patent			Apparatus for testing polymeric materials Patent	
[NASA-CASE-XNP-03744]	c10	N71-20448	[NASA-CASE-XNP-09699]	c06 N71-24607
Processing for producing a sterilized instrument Patent			Digital synchronizer Patent	
[NASA-CASE-XNP-09763]	c14	N71-20461	[NASA-CASE-NPO-10851]	c07 N71-24613
Signal-to-noise ratio estimating by taking ratio of mean and standard deviation of integrated signal samples Patent			Signal processing apparatus for multiplex transmission Patent	
[NASA-CASE-XNP-05254]	c07	N71-20791	[NASA-CASE-NPO-10388]	c07 N71-24622
Elimination of frequency shift in a multiplex communication system Patent			Self-testing and repairing computer Patent	
[NASA-CASE-XNP-01306]	c07	N71-20814	[NASA-CASE-NPO-10567]	c08 N71-24633
High power-high voltage waterload Patent			Serial digital decoder Patent	
[NASA-CASE-XNP-05381]	c09	N71-20842	[NASA-CASE-NPO-10150]	c08 N71-24650
Coaxial cable connector Patent			Detenting servomotor Patent	
[NASA-CASE-XNP-04732]	c09	N71-20851	[NASA-CASE-XNP-06936]	c15 N71-24695
Soldering with solder flux which leaves corrosion resistant coating Patent			Reversible motion drive system Patent	
[NASA-CASE-XNP-03459]	c15	N71-21078	[NASA-CASE-NPO-10173]	c15 N71-24696
Miniature stress transducer Patent			Decoder system Patent	
[NASA-CASE-XNP-02983]	c14	N71-21091	[NASA-CASE-NPO-10118]	c07 N71-24741
Holder for crystal resonators Patent			Television signal processing system Patent	
[NASA-CASE-XNP-03637]	c15	N71-21311	[NASA-CASE-NPO-10140]	c07 N71-24742
Correlation function apparatus Patent			Switching circuit Patent	
[NASA-CASE-XNP-00746]	c07	N71-21476	[NASA-CASE-XNP-06505]	c10 N71-24799
Split nut separation system Patent			Magnetic power switch Patent	
[NASA-CASE-XNP-06914]	c15	N71-21489	[NASA-CASE-NPO-10242]	c09 N71-24803
Light position locating system Patent			Remodulator filter Patent	
[NASA-CASE-XNP-01059]	c23	N71-21821	[NASA-CASE-NPO-10198]	c09 N71-24806
Electron bombardment ion engine Patent			Broadband microwave waveguide window Patent	
[NASA-CASE-XNP-04124]	c28	N71-21822	[NASA-CASE-NPO-08880]	c09 N71-24808
Data compressor Patent			Cavity radiometer Patent	
[NASA-CASE-XNP-04067]	c08	N71-22707	[NASA-CASE-XNP-08961]	c14 N71-24809
Error correcting method and apparatus Patent			High-gain, broadband traveling wave maser Patent	
[NASA-CASE-XNP-02748]	c08	N71-22749	[NASA-CASE-NPO-10548]	c16 N71-24831
Counter and shift register Patent			Fluid containers and resealable septum therefor Patent	
[NASA-CASE-XNP-01753]	c08	N71-22897	[NASA-CASE-NPO-10123]	c15 N71-24835
Friction measuring apparatus Patent			Temperature telemetric transmitter Patent	
[NASA-CASE-XNP-08680]	c14	N71-22995	[NASA-CASE-NPO-10649]	c07 N71-24840
Hybrid lubrication system and bearing Patent			Tuning arrangement for an electron discharge device or the like Patent	
[NASA-CASE-XNP-01641]	c15	N71-22997	[NASA-CASE-XNP-09771]	c09 N71-24841
Filler valve Patent			Noise limiter Patent	
[NASA-CASE-XNP-01747]	c15	N71-23024	[NASA-CASE-NPO-10169]	c10 N71-24844
Refrigeration apparatus Patent			Noninterruptable digital counting system Patent	
[NASA-CASE-XNP-08877]	c15	N71-23025	[NASA-CASE-XNP-09759]	c08 N71-24891
Reduced bandwidth video communication system utilizing sampling techniques Patent			Drive circuit for minimizing power consumption in inductive load Patent	
[NASA-CASE-XNP-02791]	c07	N71-23026	[NASA-CASE-NPO-10716]	c09 N71-24892
Model launcher for wind tunnels Patent			Space simulator Patent	
[NASA-CASE-XNP-03578]	c11	N71-23030	[NASA-CASE-NPO-10741]	c11 N71-24964
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[NASA-CASE-XNP-01318]	c10	N71-23033	[NASA-CASE-XNP-09469]	c24 N71-25555
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Spacecraft attitude detection system by stellar reference Patent [NASA-CASE-XGS-03431]	c21 N71-15642	System for recording and reproducing pulse code modulated data Patent [NASA-CASE-XGS-01021]	c08 N71-21042
Cartwheel satellite synchronization system Patent [NASA-CASE-XGS-05579]	c31 N71-15676	Satellite appendage tie down cord Patent [NASA-CASE-XGS-02554]	c31 N71-21064
Wide range linear fluxgate magnetometer Patent [NASA-CASE-XGS-01587]	c14 N71-15962	Reaction wheel scanner Patent [NASA-CASE-XGS-02629]	c14 N71-21082
Low friction magnetic recording tape Patent [NASA-CASE-XGS-00373]	c23 N71-15978	Nonmagnetic, explosive actuated indexing device Patent [NASA-CASE-XGS-02422]	c15 N71-21529
Method for etching copper Patent [NASA-CASE-XGS-06306]	c17 N71-16044	Bidirectional step torque filter with zero backlash characteristic Patent [NASA-CASE-XGS-04227]	c15 N71-21744
Bacteriostatic conformal coating and methods of application Patent [NASA-CASE-GSC-10007]	c18 N71-16046	Conforming polisher for aspheric surface of revolution Patent [NASA-CASE-XGS-02884]	c15 N71-22705
Serrodyne frequency converter re-entrant amplifier system Patent [NASA-CASE-XGS-01022]	c07 N71-16088	Precision thrust gage Patent [NASA-CASE-XGS-02319]	c14 N71-22965
Position location and data collection system and method Patent [NASA-CASE-GSC-10083-1]	c30 N71-16090	Sealing device for an electrochemical cell Patent [NASA-CASE-XGS-02630]	c03 N71-22974
Position sensing device employing misaligned magnetic field generating and detecting apparatus Patent [NASA-CASE-XGS-07514]	c23 N71-16099	Rotary bead dropper and selector for testing micrometeorite detectors Patent [NASA-CASE-XGS-03304]	c09 N71-22988
Optical tracker having overlapping reticles on parallel axes Patent [NASA-CASE-XGS-05715]	c23 N71-16100	Moment of inertia test fixture Patent [NASA-CASE-XGS-01023]	c14 N71-22992
Self-erecting reflector Patent [NASA-CASE-XGS-09190]	c31 N71-16102	Fluid flow meter with comparator reference means Patent [NASA-CASE-XGS-01331]	c14 N71-22996
Dust particle injector for hypervelocity accelerators Patent [NASA-CASE-XGS-06628]	c24 N71-16213	Foamed in place ceramic refractory insulating material Patent [NASA-CASE-XGS-02435]	c18 N71-22998
Ellipsoidal mirror reflectometer including means for averaging the radiation reflected from the sample Patent [NASA-CASE-XGS-05291]	c23 N71-16341	Digital telemetry system Patent [NASA-CASE-XGS-01812]	c07 N71-23001
Angular position and velocity sensing apparatus Patent [NASA-CASE-XGS-05680]	c14 N71-17585	Bonded elastomeric seal for electrochemical cells Patent [NASA-CASE-XGS-02631]	c03 N71-23006
Apparatus for controlling the velocity of an electromechanical drive for interferometers and the like Patent [NASA-CASE-XGS-03532]	c14 N71-17627	Apparatus providing a directive field pattern and attitude sensing of a spin stabilized satellite Patent [NASA-CASE-XGS-02607]	c31 N71-23009
Omni-directional anisotropic molecular trap Patent [NASA-CASE-XGS-00783]	c30 N71-17788	Complementary regenerative switch Patent [NASA-CASE-XGS-02751]	c09 N71-23015
Method of making tubes Patent [NASA-CASE-XGS-04175]	c15 N71-18579	Solid state pulse generator with constant output width, for variable input width, in nanosecond range Patent [NASA-CASE-XGS-03427]	c10 N71-23029
Pulse-type magnetic core memory element circuit with blocking oscillator feedback Patent [NASA-CASE-XGS-03303]	c08 N71-18595	Sidereal frequency generator Patent [NASA-CASE-XGS-02610]	c14 N71-23174
Ripple add and ripple subtract binary counters Patent [NASA-CASE-XGS-04766]	c08 N71-18602	Solar cell and circuit array and process for nullifying magnetic fields Patent [NASA-CASE-XGS-03390]	c03 N71-23187
Computing apparatus Patent [NASA-CASE-XGS-04765]	c08 N71-18693	Passive synchronized spike generator with high input impedance and low output impedance and capacitor power supply Patent [NASA-CASE-XGS-03632]	c09 N71-23311
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Traffic control system and method Patent [NASA-CASE-GSC-10087-1]	c02 N71-19287	Digitally controlled frequency synthesizer Patent [NASA-CASE-XGS-02317]	c09 N71-23525
Apparatus for measuring current flow Patent [NASA-CASE-XGS-02439]	c14 N71-19431	Radio frequency coaxial high pass filter Patent [NASA-CASE-XGS-01418]	c09 N71-23573
Synchronous counter Patent [NASA-CASE-XGS-02440]	c08 N71-19432	Apparatus for phase stability determination Patent [NASA-CASE-XGS-01118]	c10 N71-23662
Wide range data compression system Patent [NASA-CASE-XGS-02612]	c08 N71-19435	Tape recorder Patent [NASA-CASE-XGS-08259]	c14 N71-23698
Apparatus for computing square roots Patent [NASA-CASE-XGS-04768]	c08 N71-19437	Balance torque meter Patent [NASA-CASE-XGS-01013]	c14 N71-23725
Method and apparatus for battery charge control Patent [NASA-CASE-XGS-05432]	c03 N71-19438	Mechanical actuator Patent [NASA-CASE-XGS-04548]	c15 N71-24045
Stable amplifier having a stable quiescent point Patent [NASA-CASE-XGS-02812]	c09 N71-19466	Selective plating of etched circuits without removing previous plating Patent [NASA-CASE-XGS-03120]	c15 N71-24047
Tracking antenna system Patent [NASA-CASE-GSC-10553-1]	c07 N71-19854	Alkali metal silicate protective coating Patent [NASA-CASE-XGS-04799]	c18 N71-24183
Electrochemical coulometer and method of forming same Patent [NASA-CASE-XGS-05434]	c03 N71-20491	Strain gauge measuring techniques Patent [NASA-CASE-XGS-04478]	c14 N71-24233
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Electromagnetic polarization systems and methods Patent		
[NASA-CASE-GSC-10021-1]	c09	N71-24595
Redundant actuating mechanism Patent		
[NASA-CASE-XGS-08718]	c15	N71-24600
Satellite communication system and method Patent		
[NASA-CASE-GSC-10118-1]	c07	N71-24621
Programmable telemetry system Patent		
[NASA-CASE-GSC-10131-1]	c07	N71-24624
Coulometer and third electrode battery charging circuit Patent		
[NASA-CASE-GSC-10487-1]	c03	N71-24719
Electronic scanning of 2-channel monopulse patterns Patent		
[NASA-CASE-GSC-10299-1]	c09	N71-24804
Annular slit colloid thruster Patent		
[NASA-CASE-GSC-10709-1]	c28	N71-25213
Voltage to frequency converter Patent		
[NASA-CASE-GSC-10022-1]	c10	N71-25882
Direct current motor with stationary armature and field Patent		
[NASA-CASE-XGS-05290]	c09	N71-25999
Buck boost voltage regulation circuit Patent		
[NASA-CASE-GSC-10735-1]	c10	N71-26085
Adaptive system and method for signal generation Patent		
[NASA-CASE-GSC-11367]	c10	N71-26374
Control apparatus for applying pulses of selectively predetermined duration to a sequence of loads Patent		
[NASA-CASE-XGS-04224]	c10	N71-26418
Turn on transient limiter Patent		
[NASA-CASE-GSC-10413]	c10	N71-26531
Voltage regulator with plural parallel power source sections Patent		
[NASA-CASE-GSC-10891-1]	c10	N71-26626
Method for generating ultra-precise angles Patent		
[NASA-CASE-XGS-04173]	c19	N71-26674
Resettable monostable pulse generator Patent		
[NASA-CASE-GSC-11139]	c09	N71-27016
Micro-pound extended range thrust stand Patent		
[NASA-CASE-GSC-10710-1]	c28	N71-27094
Synchronous dc direct drive system Patent		
[NASA-CASE-GSC-10065-1]	c10	N71-27136
Antenna array at focal plane of reflector with coupling network for beam switching Patent		
[NASA-CASE-GSC-10220-1]	c07	N71-27233
Gravity gradient attitude control system Patent		
[NASA-CASE-GSC-10555-1]	c21	N71-27324
Segmented superconducting magnet for a broadband traveling wave maser Patent		
[NASA-CASE-XGS-10518]	c16	N71-28554
Millimeter wave antenna system Patent Application		
[NASA-CASE-GSC-10949-1]	c07	N71-28965
Sampled data controller Patent		
[NASA-CASE-GSC-10554-1]	c08	N71-29033
Variable digital processor including a register for shifting and rotating bits in either direction Patent		
[NASA-CASE-GSC-10186]	c08	N71-33110
Processes for making sheets with parallel pores of uniform size		
[NASA-CASE-GSC-10984-1]	c15	N71-34427
Combustion products generating and metering device		
[NASA-CASE-GSC-11095-1]	c14	N72-10375
Analog spatial maneuver computer		
[NASA-CASE-GSC-10880-1]	c08	N72-11172
Helical recorder arrangement for multiple channel recording on both sides of the tape		
[NASA-CASE-GSC-10614-1]	c09	N72-11224
Method and apparatus for eliminating coherent noise in a coherent energy imaging system without destroying spatial coherence		
[NASA-CASE-GSC-11133-1]	c23	N72-11568
Position location system and method		
[NASA-CASE-GSC-10087-3]	c07	N72-12080
Facsimile video remodulation network		
[NASA-CASE-GSC-10185-1]	c07	N72-12081
Frangible electrochemical cell		
[NASA-CASE-XGS-10010]	c03	N72-15986
Caterpillar micro positioner		
[NASA-CASE-GSC-10780-1]	c14	N72-16283
Minimech self-deploying boom mechanism		
[NASA-CASE-GSC-10566-1]	c15	N72-18477
Heated porous plug microthruster		
[NASA-CASE-GSC-10640-1]	c28	N72-18766
Optimum performance spacecraft solar cell system		
[NASA-CASE-GSC-10669-1]	c03	N72-20031
Monostable multivibrator		
[NASA-CASE-GSC-10082-1]	c10	N72-20221
Roll alignment detector		
[NASA-CASE-GSC-10514-1]	c14	N72-20379
Cosmic dust sensor		
[NASA-CASE-GSC-10503-1]	c14	N72-20381
Solenoid valve including guide for armature and valve member		
[NASA-CASE-GSC-10607-1]	c15	N72-20442
Fast response low power drain logic circuits		
[NASA-CASE-GSC-10878-1]	c10	N72-22236
Trap for preventing diffusion pump backstreaming		
[NASA-CASE-GSC-10518-1]	c15	N72-22489
Resistance soldering apparatus		
[NASA-CASE-GSC-10913]	c15	N72-22491
Optical system support apparatus		
[NASA-CASE-XER-07896-2]	c23	N72-22673
SCR lamp driver		
[NASA-CASE-GSC-10221-1]	c09	N72-23171
Potassium silicate zinc coatings		
[NASA-CASE-GSC-10361-1]	c18	N72-23581
Synchronous orbit battery cyclor		
[NASA-CASE-GSC-11211-1]	c03	N72-25020
Flavin coenzyme assay		
[NASA-CASE-GSC-10565-1]	c06	N72-25149
Location identification system		
[NASA-CASE-ERC-10324]	c07	N72-25173
A dc to ac to dc converter having transistor synchronous rectifiers		
[NASA-CASE-GSC-11126-1]	c09	N72-25253
Tungsten contacts on silicon substrates		
[NASA-CASE-GSC-10695-1]	c09	N72-25259
Bacterial contamination monitor		
[NASA-CASE-GSC-10879-1]	c14	N72-25413
Honeycomb panels formed of minimal surface periodic tubule layers		
[NASA-CASE-ERC-10364]	c18	N72-25540
Honeycomb core structures of minimal surface tubule sections		
[NASA-CASE-ERC-10363]	c18	N72-25541
Gunn-type solid state devices		
[NASA-CASE-XER-07895]	c26	N72-25679
Use of unilluminated solar cells as shunt diodes for a solar array		
[NASA-CASE-GSC-10344-1]	c03	N72-27053
Active tuned circuit		
[NASA-CASE-GSC-11340-1]	c10	N72-33230
Electric motive machine including magnetic bearing		
[NASA-CASE-XGS-07805]	c15	N72-33476
Cosmic dust or other similar outer space particles impact location detector		
[NASA-CASE-GSC-11291-1]	c25	N72-33696
Method and apparatus for determining the contents of contained gas samples		
[NASA-CASE-GSC-10903-1]	c14	N73-12444
System for stabilizing torque between a balloon and gondola		
[NASA-CASE-GSC-11077-1]	c02	N73-13008
Diffuse reflective coating		
[NASA-CASE-GSC-11214-1]	c06	N73-13128
Data processor with conditionally supplied clock signals		
[NASA-CASE-GSC-10975-1]	c08	N73-13187
Apparatus for vibrational testing of articles		
[NASA-CASE-GSC-11302-1]	c14	N73-13416
Method and system for ejecting fairing sections from a rocket vehicle		
[NASA-CASE-GSC-10590-1]	c31	N73-14853
Plural beam antenna		
[NASA-CASE-GSC-11013-1]	c09	N73-19234
Star tracking reticles and process for the production thereof		
[NASA-CASE-GSC-11188-2]	c21	N73-19630
Delayed simultaneous release mechanism		
[NASA-CASE-GSC-10814-1]	c03	N73-20039
Doppler compensation by shifting transmitted object frequency within limits		
[NASA-CASE-GSC-10087-4]	c07	N73-20174
Telemetry processor		
[NASA-CASE-GSC-11388-1]	c07	N73-24187
Signal-to-noise ratio determination circuit		
[NASA-CASE-GSC-11239-1]	c10	N73-25241
Mutation damper		
[NASA-CASE-GSC-11205-1]	c15	N73-25513
Low outgassing polydimethylsiloxane material and preparation thereof		
[NASA-CASE-GSC-11358-1]	c06	N73-26100
Method of detecting and counting bacteria in body fluids		

[NASA-CASE-GSC-11092-2] c04 N73-27052
Protein sterilization method of firefly luciferase using reduced pressure and molecular sieves
[NASA-CASE-GSC-10225-1] c06 N73-27086
Process for making RF shielded cable assemblies and the products formed thereby
[NASA-CASE-GSC-11215-1] c09 N73-28083
Device for determining relative angular position between a spacecraft and a radiation emitting celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490
Microscope multi-angle, reflection, viewing adaptor and photographic recording system
[NASA-CASE-GSC-11690-1] c14 N73-28499
Fastener stretcher
[NASA-CASE-GSC-11149-1] c15 N73-30457
Spacecraft attitude sensor
[NASA-CASE-GSC-10890-1] c21 N73-30640
Digital phase locked loop
[NASA-CASE-GSC-11623-1] c10 N73-31202
Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] c05 N73-32011
Radiation hardening of MOS devices by boron
[NASA-CASE-GSC-11425-2] c09 N73-32114
Star tracking reticles
[NASA-CASE-GSC-11188-1] c14 N73-32320
Peen plating
[NASA-CASE-GSC-11163-1] c15 N73-32360
Low speed phaselock speed control system
[NASA-CASE-GSC-11127-1] c09 N74-10202
Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c18 N74-10542
Recorder/processor apparatus
[NASA-CASE-GSC-11553-1] c07 N74-15831
Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c15 N74-18132
Method of making porous conductive supports for electrodes
[NASA-CASE-GSC-11367-1] c03 N74-19692
Piezoelectric relay
[NASA-CASE-GSC-11627-1] c09 N74-19852
Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c14 N74-20008
Radiation hardening of MOS devices by boron
[NASA-CASE-GSC-11425-1] c24 N74-20329
Amplitude steered array
[NASA-CASE-GSC-11446-1] c09 N74-20860
Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly
[NASA-CASE-GSC-11560-1] c09 N74-20861
Ultra-stable oscillator with complementary transistors
[NASA-CASE-GSC-11513-1] c09 N74-20862
High efficiency multifrequency feed
[NASA-CASE-GSC-11317-3] c09 N74-20863
Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c09 N74-20864
Method and apparatus for checking fire detectors
[NASA-CASE-GSC-11600-1] c14 N74-21019
Long range laser traversing system
[NASA-CASE-GSC-11262-1] c16 N74-21091
Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c23 N74-21304
Image tube
[NASA-CASE-GSC-11602-1] c09 N74-21850
Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c07 N74-22827
High voltage distributor
[NASA-CASE-GSC-11849-1] c09 N74-22873
Apparatus for controlling the temperature of balloon-borne equipment
[NASA-CASE-GSC-11620-1] c14 N74-23039
Improved method of detecting and counting bacteria
[NASA-CASE-GSC-11917-1] c04 N74-26619
Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c14 N74-26949
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566
Heat flow calorimeter
[NASA-CASE-GSC-11434-1] c14 N74-27859
Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c15 N74-27902

Passive dual spin misalignment compensators
[NASA-CASE-GSC-11479-1] c21 N74-28097
Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c07 N74-30532
Star scanner
[NASA-CASE-GSC-11569-1] c14 N74-30886
Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c09 N74-32660
Variable beamwidth antenna
[NASA-CASE-GSC-11862-1] c09 N74-32674
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c14 N74-32886
Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c14 N74-32887
Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c14 N74-32888
Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c15 N74-33997
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-2] c15 N74-34002
Two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c09 N74-34649
Structural heat pipe
[NASA-CASE-GSC-11619-1] c34 N75-12222
Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N75-16748
Automatic character skew and spacing checking network
[NASA-CASE-GSC-11925-1] c35 N75-16792
Magnetic bearing
[NASA-CASE-GSC-11079-1] c37 N75-18574
Dish antenna having switchable beamwidth
[NASA-CASE-GSC-11760-1] c33 N75-19516
X-Y alphanumeric character generator for oscilloscopes
[NASA-CASE-GSC-11582-1] c33 N75-19517
Controllable high voltage source having fast settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522
Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
Self-regulating proportionally controlled heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, JOHN F. KENNEDY SPACE CENTER, COCOA BEACH, FLA.
Device for determining the accuracy of the flare on a flared tube
[NASA-CASE-XKS-03495] c14 N69-39785
Quick attach and release fluid coupling assembly Patent
[NASA-CASE-XKS-01985] c15 N71-10782
Parasitic probe antenna Patent
[NASA-CASE-XKS-09348] c09 N71-13521
Electronic checkout system for space vehicles Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566
Apparatus for tensile testing Patent
[NASA-CASE-XKS-06250] c14 N71-15600
Weatherproof helix antenna Patent
[NASA-CASE-XKS-08485] c07 N71-19493
Valve seat with resilient support member Patent
[NASA-CASE-XKS-02582] c15 N71-21234
Diode and protection fuse unit Patent
[NASA-CASE-XKS-03381] c09 N71-22796
Optical monitor panel Patent
[NASA-CASE-XKS-03509] c14 N71-23175
Separation simulator Patent
[NASA-CASE-XKS-04631] c10 N71-23663
Controlled release device Patent
[NASA-CASE-XKS-03338] c15 N71-24043
Phonocardiogram simulator Patent
[NASA-CASE-XKS-10804] c05 N71-24606
VHF/UHF parasitic probe antenna Patent
[NASA-CASE-XKS-09340] c07 N71-24614
BCD to decimal decoder Patent
[NASA-CASE-XKS-06167] c08 N71-24890
Flammability test chamber Patent
[NASA-CASE-XKS-10126] c11 N71-24985
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[NASA-CASE-XKS-10002] c10 N71-25865

Weld preparation machine Patent [NASA-CASE-XKS-07953]	c15 N71-26134	Electromagnetic mirror drive system [NASA-CASE-XLA-03724]	c14 N69-27461
Validation device for spacecraft checkout equipment Patent [NASA-CASE-XKS-10543]	c07 N71-26292	Evaporant holder [NASA-CASE-XLA-03105]	c15 N69-27483
Internal work light Patent [NASA-CASE-XKS-05932]	c09 N71-26787	Compensating radioneter [NASA-CASE-XLA-04556]	c14 N69-27484
Emergency escape system Patent [NASA-CASE-XKS-07814]	c15 N71-27067	Tubular coupling having frangible connecting means [NASA-CASE-XLA-02854]	c15 N69-27490
Voltage dropout sensor Patent [NASA-CASE-KSC-10020]	c10 N71-27338	Fatigue-resistant shear pin [NASA-CASE-XLA-09122]	c15 N69-27505
Autoignition test cell Patent [NASA-CASE-KSC-10198]	c11 N71-28629	Ablation sensor [NASA-CASE-XLA-01781]	c14 N69-39975
Protective suit having an audio transceiver Patent [NASA-CASE-KSC-10164]	c07 N71-33108	Aeroflexible structures [NASA-CASE-XLA-06095]	c01 N69-39981
Ripple indicator [NASA-CASE-KSC-10162]	c09 N72-11225	Transient-compensated SCR inverter [NASA-CASE-XLA-08507]	c09 N69-39984
High speed photo-optical time recording [NASA-CASE-KSC-10294]	c14 N72-18411	Capacitor power pak Patent Application [NASA-CASE-LAR-10367-1]	c03 N70-26817
High speed direct binary-to-binary coded decimal converter [NASA-CASE-KSC-10326]	c08 N72-21197	Disk pack cleaning table Patent Application [NASA-CASE-LAR-10590-1]	c15 N70-26819
Automatic frequency control loop including synchronous switching circuits [NASA-CASE-KSC-10393]	c09 N72-21247	Folding apparatus Patent [NASA-CASE-XLA-00137]	c15 N70-33180
Universal environment package with sectional component housing [NASA-CASE-KSC-10031]	c15 N72-22486	Infrared scanner Patent [NASA-CASE-XLA-00120]	c21 N70-33181
Buffered analog converter [NASA-CASE-KSC-10397]	c08 N72-25206	Reentry vehicle leading edge Patent [NASA-CASE-XLA-00165]	c31 N70-33242
Lamp modulator [NASA-CASE-KSC-10565]	c09 N72-25250	Motion picture camera for optical pyrometry Patent [NASA-CASE-XLA-00062]	c14 N70-33254
Cable stabilizer for open shaft cable operated elevators [NASA-CASE-KSC-10513]	c15 N72-25453	Variable sweep wing configuration Patent [NASA-CASE-XLA-00230]	c02 N70-33255
Pressurized lighting system [NASA-CASE-KSC-10644]	c09 N72-27227	Variable sweep wing aircraft Patent [NASA-CASE-XLA-00221]	c02 N70-33266
High speed direct binary to binary coded decimal converter and scaler [NASA-CASE-KSC-10595]	c08 N73-12176	Plasma accelerator Patent [NASA-CASE-XLA-00675]	c25 N70-33267
Geysering inhibitor for vertical cryogenic transfer pipe [NASA-CASE-KSC-10615]	c15 N73-12486	Survival couch Patent [NASA-CASE-XLA-00118]	c05 N70-33285
Electronic video editor [NASA-CASE-KSC-10003]	c10 N73-13235	Landing arrangement for aerial vehicles Patent [NASA-CASE-XLA-00142]	c02 N70-33286
Character indicating display device [NASA-CASE-XKS-00348]	c09 N73-14215	Wind tunnel airstream oscillating apparatus Patent [NASA-CASE-XLA-00112]	c11 N70-33287
Collapsible high gain antenna [NASA-CASE-KSC-10392]	c07 N73-26117	Hydrofoil Patent [NASA-CASE-XLA-00229]	c12 N70-33305
Floating baffle to improve efficiency of liquid transfer from tanks [NASA-CASE-KSC-10639]	c15 N73-26472	High intensity heat and light unit Patent [NASA-CASE-XLA-00141]	c09 N70-33312
Zero gravity liquid transfer screen [NASA-CASE-KSC-10626]	c14 N73-27378	Particle detection apparatus Patent [NASA-CASE-XLA-00135]	c14 N70-33322
Optical rotational sensor [NASA-CASE-KSC-10752-1]	c15 N73-27407	Runway light Patent [NASA-CASE-XLA-00119]	c11 N70-33329
Television multiplexing system [NASA-CASE-KSC-10654-1]	c07 N73-30115	Spherical solid-propellant rocket motor Patent [NASA-CASE-XLA-00105]	c28 N70-33331
Dual digital video switcher [NASA-CASE-KSC-10782-1]	c07 N73-32063	Jet aircraft configuration Patent [NASA-CASE-XLA-00087]	c02 N70-33332
Lightning tracking system [NASA-CASE-KSC-10729-1]	c09 N73-32110	Aerial capsule emergency separation device Patent [NASA-CASE-XLA-00115]	c03 N70-33343
Rocket borne instrument to measure electric fields inside electrified clouds [NASA-CASE-KSC-10730-1]	c14 N73-32318	Nozzle Patent [NASA-CASE-XLA-00154]	c28 N70-33374
Lightning current measuring systems [NASA-CASE-KSC-10807-1]	c14 N74-22113	Air frame drag balance Patent [NASA-CASE-XLA-00113]	c14 N70-33386
Electric field measuring and display system [NASA-CASE-KSC-10731-1]	c14 N74-27862	Flexible foam erectable space structures Patent [NASA-CASE-XLA-00686]	c31 N70-34135
Digital servo controller [NASA-CASE-KSC-10769-1]	c09 N74-29556	Nose gear steering system for vehicle with main skids Patent [NASA-CASE-XLA-01804]	c02 N70-34160
Signal conditioner test set [NASA-CASE-KSC-10750-1]	c35 N75-12270	Surface roughness detector Patent [NASA-CASE-XLA-00203]	c14 N70-34161
Variable resistance constant tension and lubrication device [NASA-CASE-KSC-10723-1]	c37 N75-13265	Variable-span aircraft Patent [NASA-CASE-XLA-00166]	c02 N70-34178
Voltage monitoring system [NASA-CASE-KSC-10736-1]	c33 N75-19521	Dynamic precession damper for spin stabilized vehicles Patent [NASA-CASE-XLA-01989]	c21 N70-34295
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. LANGLEY RESEARCH CENTER, LANGLEY STATION, VA.		Erectable modular space station Patent [NASA-CASE-XLA-00678]	c31 N70-34296
Jet shoes [NASA-CASE-XLA-08491]	c05 N69-21380	Electric-arc heater Patent [NASA-CASE-XLA-00330]	c33 N70-34540
Condenser - Separator [NASA-CASE-XLA-08645]	c15 N69-21465	Ac power amplifier Patent Application [NASA-CASE-LAR-10218-1]	c09 N70-34559
Connector - Electrical [NASA-CASE-XLA-01288]	c09 N69-21470	Method and apparatus for producing a plasma Patent [NASA-CASE-XLA-00147]	c25 N70-34661
A support technique for vertically oriented launch vehicles [NASA-CASE-XLA-02704]	c11 N69-21540	Gas actuated bolt disconnect Patent [NASA-CASE-XLA-00326]	c03 N70-34667
		Logarithmic converter Patent [NASA-CASE-XLA-00471]	c08 N70-34778
		Mandrel for shaping solid propellant rocket fuel into a motor casing Patent [NASA-CASE-XLA-00304]	c27 N70-34783
		Impact simulator Patent [NASA-CASE-XLA-00493]	c11 N70-34786
		Accelerometer with FM output Patent [NASA-CASE-XLA-00492]	c14 N70-34799

Frangible tube energy dissipation Patent		Double hinged flap Patent	
[NASA-CASE-XLA-00754]	c15 N70-34850	[NASA-CASE-XLA-01290]	c02 N70-42016
Landing arrangement for aerial vehicle Patent		Spacecraft separation system for spinning	
[NASA-CASE-XLA-00806]	c02 N70-34858	vehicles and/or payloads Patent	
Method and apparatus for shock protection Patent		[NASA-CASE-XLA-02132]	c31 N71-10582
[NASA-CASE-XLA-00482]	c15 N70-36409	Method for molding compounds Patent	
Inflatable honeycomb Patent		[NASA-CASE-XLA-01091]	c15 N71-10672
[NASA-CASE-XLA-00204]	c32 N70-36536	Automatic force measuring system Patent	
Thermal control of space vehicles Patent		[NASA-CASE-XLA-02605]	c14 N71-10773
[NASA-CASE-XLA-01291]	c33 N70-36617	Gas analyzer for bi-gaseous mixtures Patent	
Foam generator Patent		[NASA-CASE-XLA-01131]	c14 N71-10774
[NASA-CASE-XLA-00838]	c03 N70-36778	Multiple input radio receiver Patent	
Parachute glider Patent		[NASA-CASE-XLA-00901]	c07 N71-10775
[NASA-CASE-XLA-00898]	c02 N70-36804	Rotating space station simulator Patent	
Production of high purity silicon carbide Patent		[NASA-CASE-XLA-03127]	c11 N71-10776
[NASA-CASE-XLA-00158]	c26 N70-36805	Composite powerplant and shroud therefor Patent	
Airplane take-off performance indicator Patent		[NASA-CASE-XLA-01043]	c28 N71-10780
[NASA-CASE-XLA-00100]	c14 N70-36807	All-directional fastener Patent	
Aerodynamic measuring device Patent		[NASA-CASE-XLA-01807]	c15 N71-10799
[NASA-CASE-XLA-00481]	c14 N70-36824	Hot air balloon deceleration and recovery system	
Aircraft wheel spray drag alleviator Patent		Patent	
[NASA-CASE-XLA-01583]	c02 N70-36825	[NASA-CASE-XLA-06824-2]	c02 N71-11037
Attitude orientation of spin-stabilized space		Control for flexible parawing Patent	
vehicles Patent		[NASA-CASE-XLA-06958]	c02 N71-11038
[NASA-CASE-XLA-00281]	c21 N70-36943	Variable sweep aircraft Patent	
Continuously operating induction plasma		[NASA-CASE-XLA-03659]	c02 N71-11041
accelerator Patent		Translating horizontal tail Patent	
[NASA-CASE-XLA-01354]	c25 N70-36946	[NASA-CASE-XLA-08801-1]	c02 N71-11043
Check valve assembly for a probe Patent		Space suit pressure stabilizer Patent	
[NASA-CASE-XLA-00128]	c15 N70-37925	[NASA-CASE-XLA-05332]	c05 N71-11194
Space capsule Patent		Equipotential space suit Patent	
[NASA-CASE-XLA-00149]	c31 N70-37938	[NASA-CASE-XLA-10007-1]	c05 N71-11195
Sandwich panel construction Patent		Recovery of potable water from human wastes in	
[NASA-CASE-XLA-00349]	c33 N70-37979	below-G conditions Patent	
Reflector space satellite Patent		[NASA-CASE-XLA-03213]	c05 N71-11207
[NASA-CASE-XLA-00138]	c31 N70-37981	Process for interfacial polymerization of	
Variable-geometry winged reentry vehicle Patent		pyromellitic dianhydride and 1,2,4,	
[NASA-CASE-XLA-00241]	c31 N70-37986	5-tetraamino-benzene Patent	
Vehicle parachute and equipment jettison system		[NASA-CASE-XLA-03104]	c06 N71-11235
Patent		Imidazopyrrolone/imide copolymers Patent	
[NASA-CASE-XLA-00195]	c02 N70-38009	[NASA-CASE-XLA-08802]	c06 N71-11238
Landing arrangement for aerospace vehicle Patent		Adaptive compression of communication signals	
[NASA-CASE-XLA-00805]	c31 N70-38010	Patent	
Antenna system using parasitic elements and two		[NASA-CASE-XLA-03076]	c07 N71-11266
driven elements at 90 deg angle fed 180 deg		Reentry communication by material addition Patent	
out of phase Patent		[NASA-CASE-XLA-01552]	c07 N71-11284
[NASA-CASE-XLA-00414]	c07 N70-38200	Cooperative Doppler radar system Patent	
Despin weight release Patent		[NASA-CASE-XLA-10403]	c21 N71-11766
[NASA-CASE-XLA-00679]	c15 N70-38601	Supersonic aircraft Patent	
Manned space station Patent		[NASA-CASE-XLA-04451]	c02 N71-12243
[NASA-CASE-XLA-00258]	c31 N70-38676	Umbilical disconnect Patent	
Missile stage separatic indicator and stage		[NASA-CASE-XLA-00711]	c03 N71-12258
initiator Patent		Remote controlled tubular disconnect Patent	
[NASA-CASE-XLA-00791]	c03 N70-39930	[NASA-CASE-XLA-01396]	c03 N71-12259
Apparatus for producing high purity silicon		Backpack carrier Patent	
carbide crystals Patent		[NASA-CASE-XLA-10056]	c05 N71-12351
[NASA-CASE-XLA-02057]	c26 N70-40015	Optical communications system Patent	
Miniature vibration isolator Patent		[NASA-CASE-XLA-01090]	c07 N71-12389
[NASA-CASE-XLA-01019]	c15 N70-40156	Analog to digital converter Patent	
Aircraft instrument Patent		[NASA-CASE-XLA-00670]	c08 N71-12501
[NASA-CASE-XLA-00487]	c14 N70-40157	Integrated time shared instrumentation display	
Radiation direction detector including means for		Patent	
compensating for photocell aging Patent		[NASA-CASE-XLA-01952]	c08 N71-12507
[NASA-CASE-XLA-00183]	c14 N70-40239	SCR blocking pulse gate amplifier Patent	
Passive communication satellite Patent		[NASA-CASE-XLA-07497]	c09 N71-12514
[NASA-CASE-XLA-00210]	c30 N70-40309	Minimum induced drag airfoil body Patent	
Electrostatic plasma modulator for space vehicle		[NASA-CASE-XLA-00755]	c01 N71-13410
re-entry communication Patent		Minimum induced drag airfoil body Patent	
[NASA-CASE-XLA-01400]	c07 N70-41331	[NASA-CASE-XLA-05828]	c01 N71-13411
Micrometeoroid velocity measuring device Patent		Mechanical stability augmentation system Patent	
[NASA-CASE-XLA-00495]	c14 N70-41332	[NASA-CASE-XLA-06339]	c02 N71-13422
Method of obtaining permanent record of surface		Automatic balancing device Patent	
flow phenomena Patent		[NASA-CASE-XLA-10774]	c10 N71-13545
[NASA-CASE-XLA-01353]	c14 N70-41366	Quick release connector Patent	
Means for communicating through a layer of		[NASA-CASE-XLA-01141]	c15 N71-13789
ionized gases Patent		Spacecraft experiment pointing and attitude	
[NASA-CASE-XLA-01127]	c07 N70-41372	control system Patent	
Quick release separation mechanism Patent		[NASA-CASE-XLA-05464]	c21 N71-14132
[NASA-CASE-XLA-01441]	c15 N70-41679	Pressurized cell micrometeoroid detector Patent	
Flexible wing deployment device Patent		[NASA-CASE-XLA-00936]	c14 N71-14996
[NASA-CASE-XLA-01220]	c02 N70-41863	Crossed-field MHD plasma generator/ accelerator	
Self-sealing, unbonded, rocket motor nozzle		Patent	
closure Patent		[NASA-CASE-XLA-03374]	c25 N71-15562
[NASA-CASE-XLA-02651]	c28 N70-41967	Adjustable attitude guide device Patent	
Fatigue testing device Patent		[NASA-CASE-XLA-07911]	c15 N71-15571
[NASA-CASE-XLA-02131]	c32 N70-42003	Control system for rocket vehicles Patent	
Techniques for insulating cryogenic fuel		[NASA-CASE-XLA-01163]	c21 N71-15582
containers Patent		Excessive temperature warning system Patent	
[NASA-CASE-XLA-01967]	c31 N70-42015	[NASA-CASE-XLA-01926]	c14 N71-15620

Alleviation of divergence during rocket launch Patent		space vehicle Patent	
[NASA-CASE-XLA-00256]	c31 N71-15663	[NASA-CASE-XLA-06232]	c25 N71-20563
Space capsule Patent		Null device for hand controller Patent	
[NASA-CASE-XLA-01332]	c31 N71-15664	[NASA-CASE-XLA-01808]	c15 N71-20740
Variable geometry manned orbital vehicle Patent		Event recorder Patent	
[NASA-CASE-XLA-03691]	c31 N71-15674	[NASA-CASE-XLA-01832]	c14 N71-21006
Payload/burned-out motor case separation system Patent		Inflatable support structure Patent	
[NASA-CASE-XLA-05369]	c31 N71-15687	[NASA-CASE-XLA-01731]	c32 N71-21045
Velocity package Patent		Past opening diaphragm Patent	
[NASA-CASE-XLA-01339]	c31 N71-15692	[NASA-CASE-XLA-03660]	c15 N71-21060
File card marker Patent		Ellipsograph for pantograph Patent	
[NASA-CASE-XLA-02705]	c08 N71-15908	[NASA-CASE-XLA-03102]	c14 N71-21079
Hypersonic test facility Patent		Random function tracer Patent	
[NASA-CASE-XLA-00378]	c11 N71-15925	[NASA-CASE-XLA-01401]	c15 N71-21179
Test unit free-flight suspension system Patent		Method and apparatus for bonding a plastics sleeve onto a metallic body Patent	
[NASA-CASE-XLA-00939]	c11 N71-15926	[NASA-CASE-XLA-01262]	c15 N71-21404
Reduced gravity simulator Patent		Hypersonic test facility Patent	
[NASA-CASE-XLA-01787]	c11 N71-16028	[NASA-CASE-XLA-05378]	c11 N71-21475
Method of coating carbonaceous base to prevent oxidation destruction and coated base Patent		Multilegged support system Patent	
[NASA-CASE-XLA-00284]	c15 N71-16075	[NASA-CASE-XLA-01326]	c11 N71-21481
Method of coating carbonaceous base to prevent oxidation destruction and coated base Patent		Macelle afterbody for jet engines Patent	
[NASA-CASE-XLA-00302]	c15 N71-16077	[NASA-CASE-XLA-10450]	c28 N71-21493
Separator Patent		Canister closing device Patent	
[NASA-CASE-XLA-00415]	c15 N71-16079	[NASA-CASE-XLA-01446]	c15 N71-21528
Omnidirectional multiple impact landing system Patent		Ablation sensor Patent	
[NASA-CASE-XLA-09881]	c31 N71-16085	[NASA-CASE-XLA-01794]	c33 N71-21586
Flexible ring slosh damping baffle Patent		Self-repeating plasma generator having communicating annular and linear arc discharge passages Patent	
[NASA-CASE-LAR-10317-1]	c32 N71-16103	[NASA-CASE-XLA-03103]	c25 N71-21693
Buoyant anti-slosh system Patent		Attitude control and damping system for spacecraft Patent	
[NASA-CASE-XLA-04605]	c32 N71-16106	[NASA-CASE-XLA-02551]	c21 N71-21708
Detector panels-micrometeoroid impact Patent		Method of making inflatable honeycomb Patent	
[NASA-CASE-XLA-05906]	c31 N71-16221	[NASA-CASE-XLA-03492]	c15 N71-22713
Wind velocity probing device and method Patent		Lunar penetrometer Patent	
[NASA-CASE-XLA-02081]	c20 N71-16281	[NASA-CASE-XLA-00934]	c14 N71-22765
Vibrating structure displacement measuring instrument Patent		Thermal control wall panel Patent	
[NASA-CASE-XLA-03135]	c32 N71-16428	[NASA-CASE-XLA-01243]	c33 N71-22792
Viscous-pendulum-damper Patent		Attitude sensor for space vehicles Patent	
[NASA-CASE-XLA-02079]	c12 N71-16894	[NASA-CASE-XLA-00793]	c21 N71-22880
Leak detector Patent		Omnidirectional microwave spacecraft antenna Patent	
[NASA-CASE-LAR-10323-1]	c12 N71-17573	[NASA-CASE-XLA-03114]	c09 N71-22888
Logic AND gate for fluid circuits Patent		Thermal control panel Patent	
[NASA-CASE-XLA-07391]	c12 N71-17579	[NASA-CASE-XLA-07728]	c33 N71-22890
Contour surveying system Patent		Spacecraft airlock Patent	
[NASA-CASE-XLA-08646]	c14 N71-17586	[NASA-CASE-XLA-02050]	c31 N71-22968
Cable arrangement for rigid tethering Patent		Station keeping of a gravity gradient stabilized satellite Patent	
[NASA-CASE-XLA-02332]	c32 N71-17609	[NASA-CASE-XLA-03132]	c31 N71-22969
Thermal pump-compressor for space use Patent		Semi-linear ball bearing Patent	
[NASA-CASE-XLA-00377]	c33 N71-17610	[NASA-CASE-XLA-02809]	c15 N71-22982
Viscous pendulum damper Patent		Heat sensing instrument Patent	
[NASA-CASE-LAR-10274-1]	c14 N71-17626	[NASA-CASE-XLA-01551]	c14 N71-22989
Self supporting space vehicle Patent		Ablation sensor Patent	
[NASA-CASE-XLA-00117]	c31 N71-17680	[NASA-CASE-XLA-01791]	c14 N71-22991
Technique for control of free-flight rocket vehicles Patent		Self-calibrating displacement transducer Patent	
[NASA-CASE-XLA-00937]	c31 N71-17691	[NASA-CASE-XLA-00781]	c09 N71-22999
Hydraulic grip Patent		Lateral displacement system for separated rocket stages Patent	
[NASA-CASE-XLA-05100]	c15 N71-17696	[NASA-CASE-XLA-04804]	c31 N71-23008
Heat protection apparatus Patent		Thermal control coating Patent	
[NASA-CASE-XLA-00892]	c33 N71-17897	[NASA-CASE-XLA-01995]	c18 N71-23047
Thermopile vacuum gage tube simulator Patent		Method of making an inflatable panel Patent	
[NASA-CASE-XLA-02758]	c14 N71-18481	[NASA-CASE-XLA-03497]	c15 N71-23052
Ionization vacuum gauge with all but the end of the ion collector shielded Patent		Variable duration pulse integrator Patent	
[NASA-CASE-XLA-07424]	c14 N71-18482	[NASA-CASE-XLA-01219]	c10 N71-23084
Safe-arm initiator Patent		Impact energy absorber Patent	
[NASA-CASE-LAR-10372]	c09 N71-18599	[NASA-CASE-XLA-01530]	c14 N71-23092
Controlled glass bead peening Patent		Micrometeoroid penetration measuring device Patent	
[NASA-CASE-XLA-07390]	c15 N71-18616	[NASA-CASE-XLA-00941]	c14 N71-23240
Exclusive-Or digital logic module Patent		Combined optical attitude and altitude indicating instrument Patent	
[NASA-CASE-XLA-07732]	c08 N71-18751	[NASA-CASE-XLA-01907]	c14 N71-23268
Slosh alleviator Patent		Solar sensor having coarse and fine sensing with matched preirradiated cells and method of selecting cells Patent	
[NASA-CASE-XLA-05749]	c15 N71-19569	[NASA-CASE-XLA-01584]	c14 N71-23269
G conditioning suit Patent		Variable width pulse integrator Patent	
[NASA-CASE-XLA-02898]	c05 N71-20268	[NASA-CASE-XLA-03356]	c10 N71-23315
Dosimeter for high levels of absorbed radiation Patent		Leading edge curvature based on convective heating Patent	
[NASA-CASE-XLA-03645]	c14 N71-20430	[NASA-CASE-XLA-01486]	c01 N71-23497
Flow field simulation Patent		Measurement of time differences between luminous events Patent	
[NASA-CASE-LAR-11138]	c12 N71-20436	[NASA-CASE-XLA-01987]	c23 N71-23976
Variable pulse width multiplier Patent			
[NASA-CASE-XLA-02850]	c09 N71-20447		
Means for measuring the electron density gradients of the plasma sheath formed around a			

Method for measuring the characteristics of a gas Patent
[NASA-CASE-XLA-03375] c16 N71-24074

Laser grating interferometer Patent
[NASA-CASE-XLA-04295] c16 N71-24170

Automatic fatigue test temperature programmer Patent
[NASA-CASE-XLA-02059] c33 N71-24276

Ring wing tension vehicle Patent
[NASA-CASE-XLA-04901] c31 N71-24315

Process for applying black coating to metals Patent
[NASA-CASE-XLA-06199] c15 N71-24875

Velocity limiting safety system Patent
[NASA-CASE-XLA-07473] c15 N71-24895

Strain coupled servo control system Patent
[NASA-CASE-XLA-08530] c32 N71-25360

Method of temperature compensating semiconductor strain gages Patent
[NASA-CASE-XLA-04555-1] c14 N71-25892

Method for improving the signal-to-noise ratio of the Wheatstone bridge type bolometer Patent
[NASA-CASE-XLA-02810] c14 N71-25901

Method of plating copper on aluminum Patent
[NASA-CASE-XLA-08966-1] c17 N71-25903

Laser calibrator Patent
[NASA-CASE-XLA-03410] c16 N71-25914

Thermal protection ablation spray system Patent
[NASA-CASE-XLA-04251] c18 N71-26100

Direct lift control system Patent
[NASA-CASE-LAR-10249-1] c02 N71-26110

Light shield and infrared reflector for fatigue testing Patent
[NASA-CASE-XLA-01782] c14 N71-26136

Dual resonant cavity absorption cell Patent
[NASA-CASE-LAR-10305] c14 N71-26137

Resilience testing device Patent
[NASA-CASE-XLA-08254] c14 N71-26161

Precipitation detector Patent
[NASA-CASE-XLA-02619] c10 N71-26334

Instrument for measuring the dynamic behavior of liquids Patent
[NASA-CASE-XLA-05541] c12 N71-26387

Arbitrarily shaped model survey system Patent
[NASA-CASE-LAR-10098] c32 N71-26681

Dielectric molding apparatus Patent
[NASA-CASE-LAR-10121-1] c15 N71-26721

Method of making a solid propellant rocket motor Patent
[NASA-CASE-XLA-04126] c28 N71-26779

Dynamic vibration absorber Patent
[NASA-CASE-LAR-10083-1] c15 N71-27006

Rate augmented digital to analog converter Patent
[NASA-CASE-XLA-07828] c08 N71-27057

High speed flight vehicle control Patent
[NASA-CASE-XLA-08967] c02 N71-27088

Suspended mass impact damper Patent
[NASA-CASE-LAR-10193-1] c15 N71-27146

Active vibration isolator for flexible bodies Patent
[NASA-CASE-LAR-10106-1] c15 N71-27169

Soldering device Patent
[NASA-CASE-XLA-08911] c15 N71-27214

Fringe counter for interferometers Patent
[NASA-CASE-LAR-10204] c14 N71-27215

Wideband VCO with high phase stability Patent
[NASA-CASE-XLA-03893] c10 N71-27271

Plural position switch status and operativeness checker Patent
[NASA-CASE-XLA-08799] c10 N71-27272

Angular displacement indicating gas bearing support system Patent
[NASA-CASE-XLA-09346] c15 N71-28740

Solid state thermal control polymer coating Patent
[NASA-CASE-XLA-01745] c33 N71-28903

Specialized halogen generator for purification of water Patent
[NASA-CASE-XLA-08913] c14 N71-28933

Optical communications system Patent
[NASA-CASE-XLA-01090] c16 N71-28963

Antenna design for surface wave suppression Patent
[NASA-CASE-XLA-10772] c07 N71-28980

Analog to digital converter tester Patent
[NASA-CASE-XLA-06713] c14 N71-28991

Method of making pressurized panel Patent
[NASA-CASE-XLA-08916] c15 N71-29018

Maksutov spectrograph Patent
[NASA-CASE-XLA-10402] c14 N71-29041

Two component bearing Patent
[NASA-CASE-XLA-00013] c15 N71-29136

Digital pulse width selection circuit Patent
[NASA-CASE-XLA-07788] c09 N71-29139

Magnetically controlled plasma accelerator Patent
[NASA-CASE-XLA-00327] c25 N71-29184

Boring bar drive mechanism Patent
[NASA-CASE-XLA-03661] c15 N71-33518

Wind tunnel model damper Patent
[NASA-CASE-XLA-09480] c11 N71-33612

Variable geometry rotor system
[NASA-CASE-LAR-10557] c02 N72-11018

Flared tube strainer
[NASA-CASE-XLA-05056] c15 N72-11389

Impact measuring technique
[NASA-CASE-LAR-10913] c14 N72-16282

Technique of duplicating fragile core
[NASA-CASE-XLA-07829] c15 N72-16329

Tube fabricating process
[NASA-CASE-LAR-10203-1] c15 N72-16330

Air bearing
[NASA-CASE-WLP-10002] c15 N72-17451

Extensometer frame
[NASA-CASE-XLA-10322] c15 N72-17452

Split range transducer
[NASA-CASE-XLA-11189] c10 N72-20222

Open tube guideway for high speed air cushioned vehicles
[NASA-CASE-LAR-10256-1] c11 N72-20253

Stereo photomicrography system
[NASA-CASE-LAR-10176-1] c14 N72-20380

Radar calibration sphere
[NASA-CASE-XLA-11154] c07 N72-21117

Recorder using selective noise filter
[NASA-CASE-ERC-10412] c07 N72-21119

Stacked array of omnidirectional antennas
[NASA-CASE-LAR-10545-1] c09 N72-21244

Electro-mechanical sine/cosine generator
[NASA-CASE-LAR-10503-1] c09 N72-21248

Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAR-10766-1] c14 N72-21432

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Method of igniting solid propellants Patent
[NASA-CASE-XLE-01988] c27 N71-15634

Fluid dispensing apparatus and method Patent
[NASA-CASE-XLE-01182] c27 N71-15635

Automatically deploying nozzle exit cone extension Patent
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High temperature cobalt-base alloy Patent
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Method of making a rocket motor casing Patent
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Rocket motor casing Patent
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Electrostatic ion rocket engine Patent
[NASA-CASE-XLE-02066] c28 N71-15661

High temperature cobalt-base alloy Patent
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Nickel-base alloy containing Mo-W-Al-Cr-Ta-Zr-C-Nb-B Patent
[NASA-CASE-XLE-02082] c17 N71-16026

Method of improving the reliability of a rolling element system Patent
[NASA-CASE-XLE-02999] c15 N71-16052

Process of casting heavy slips Patent
[NASA-CASE-XLE-00106] c15 N71-16076

Boiler for generating high quality vapor Patent
[NASA-CASE-XLE-00785] c33 N71-16104

Method of making self lubricating fluoride-metal composite materials Patent
[NASA-CASE-XLE-08511-2] c18 N71-16105

Thrust and direction control apparatus Patent
[NASA-CASE-XLE-03583] c31 N71-17629

Linear magnetic brake with two windings Patent
[NASA-CASE-XLE-05079] c15 N71-17652

Method of lubricating rolling element bearings Patent
[NASA-CASE-XLE-09527] c15 N71-17688

Hot wire liquid level detector for cryogenic fluids Patent
[NASA-CASE-XLE-00454] c23 N71-17802

Pulsed differential comparator circuit Patent
[NASA-CASE-XLE-03804] c10 N71-19471

Poil seal Patent
[NASA-CASE-XLE-05130-2] c15 N71-19570

Generator for a space power system Patent
[NASA-CASE-XLE-04250] c09 N71-20446

Method of making electrical contact on silicon solar cell and resultant product Patent
[NASA-CASE-XLE-04787] c03 N71-20492

Small plasma probe Patent
[NASA-CASE-XLE-02578] c25 N71-20747

Combined electrolysis device and fuel cell and method of operation Patent
[NASA-CASE-XLE-01645] c03 N71-20904

Pressure monitoring with a plurality of ionization gauges controlled at a central location Patent
[NASA-CASE-XLE-00787] c14 N71-21090

Control of transverse instability in rocket combustors Patent
[NASA-CASE-XLE-04603] c33 N71-21507

High voltage divider system Patent
[NASA-CASE-XLE-02008] c09 N71-21583

Plasma device feed system Patent
[NASA-CASE-XLE-02902] c25 N71-21694

Burning rate control of solid propellants Patent
[NASA-CASE-XLE-03494] c27 N71-21819

Protective device for machine and metalworking tools Patent
[NASA-CASE-XLE-01092] c15 N71-22797

Cryogenic insulation system Patent
[NASA-CASE-XLE-04222] c23 N71-22881

Method for producing fiber reinforced metallic composites Patent
[NASA-CASE-XLE-03925] c18 N71-22894

Thermal shock apparatus Patent
[NASA-CASE-XLE-02024] c14 N71-22964

Arc electrode of graphite with ball tip Patent
[NASA-CASE-XLE-04788] c09 N71-22987

Gas purged dry box glove Patent
[NASA-CASE-XLE-02531] c05 N71-23080

Automatic recording McLeod gauge Patent
[NASA-CASE-XLE-03280] c14 N71-23093

Electronic cathode having a brush-like structure and a relatively thick oxide emissive coating Patent
[NASA-CASE-XLE-04501] c09 N71-23190

High temperature ferromagnetic cobalt-base alloy Patent
[NASA-CASE-XLE-03629] c17 N71-23248

Induction furnace with perforated tungsten foil shielding Patent
[NASA-CASE-XLE-04026] c14 N71-23267

Gd or Sm doped silicon semiconductor composition Patent
[NASA-CASE-XLE-10715] c26 N71-23292

Protection of serially connected solar cells against open circuits by the use of shunting diode Patent
[NASA-CASE-XLE-04535] c03 N71-23354

Superconducting alternator Patent
[NASA-CASE-XLE-02823] c09 N71-23443

Silicon solar cell with cover glass bonded to cell by metal pattern Patent
[NASA-CASE-XLE-08569] c03 N71-23449

Analytical test apparatus and method for determining oxide content of alkali metal Patent
[NASA-CASE-XLE-01997] c06 N71-23527

Thermionic converter with current augmented by self induced magnetic field Patent
[NASA-CASE-XLE-01903] c22 N71-23599

Semiconductor material and method of making same Patent
[NASA-CASE-XLE-02798] c26 N71-23654

Insulation system Patent
[NASA-CASE-XLE-02647] c18 N71-23658

Self-lubricating fluoride metal composite materials Patent
[NASA-CASE-XLE-08511] c18 N71-23710

Alloys for bearings Patent
[NASA-CASE-XLE-05033] c15 N71-23810

Extrusion die for refractory metals Patent
[NASA-CASE-XLE-06773] c15 N71-23817

Combustion chamber Patent
[NASA-CASE-XLE-04857] c28 N71-23968

Metallic film diffusion for boundary lubrication Patent
[NASA-CASE-XLE-10337] c15 N71-24046

Process for producing dispersion strengthened nickel with aluminum Patent
[NASA-CASE-XLE-06969] c17 N71-24142

Thermal radiation shielding Patent			
[NASA-CASE-XLE-03432]	c33	N71-24145	
Method of attaching a cover glass to a silicon solar cell Patent			
[NASA-CASE-XLE-08569-2]	c03	N71-24681	
Rocket engine injector Patent			
[NASA-CASE-XLE-03157]	c28	N71-24736	
Multialarm summary alarm Patent			
[NASA-CASE-XLE-03061-1]	c10	N71-24798	
Apparatus for making curved reflectors Patent			
[NASA-CASE-XLE-08917-2]	c15	N71-24836	
Flow angle sensor and read out system Patent			
[NASA-CASE-XLE-04503]	c14	N71-24864	
Shock tube powder dispersing apparatus Patent			
[NASA-CASE-XLE-04946]	c17	N71-24911	
Pneumatic oscillator Patent			
[NASA-CASE-XLE-10345-1]	c10	N71-25899	
Heat activated cell with alkali anode and alkali salt electrolyte Patent			
[NASA-CASE-XLE-11358]	c03	N71-26084	
Method of producing refractory composites containing tantalum carbide, hafnium carbide, and hafnium boride Patent			
[NASA-CASE-XLE-03940]	c18	N71-26153	
Ion beam deflector Patent			
[NASA-CASE-XLE-10689-1]	c28	N71-26173	
Rolling element bearings Patent			
[NASA-CASE-XLE-09527-2]	c15	N71-26189	
Ion thruster accelerator system Patent			
[NASA-CASE-XLE-10106-1]	c28	N71-26642	
Propellant feed isolator Patent			
[NASA-CASE-XLE-10210-1]	c28	N71-26781	
Heat activated cell Patent			
[NASA-CASE-XLE-11359]	c03	N71-28579	
Process for glass coating an ion accelerator grid Patent			
[NASA-CASE-XLE-10278-1]	c15	N71-28582	
Fluid jet amplifier Patent			
[NASA-CASE-XLE-09341]	c12	N71-28741	
Gas core nuclear reactor Patent			
[NASA-CASE-XLE-10250-1]	c22	N71-28759	
Gas turbine combustor Patent			
[NASA-CASE-XLE-10286-1]	c28	N71-28915	
Cyclic switch Patent			
[NASA-CASE-XLE-10155-1]	c09	N71-29035	
Temperature reducing coating for metals subject to flame exposure Patent			
[NASA-CASE-XLE-00035]	c33	N71-29151	
Liquid spray cooling method Patent			
[NASA-CASE-XLE-00027]	c33	N71-29152	
Turbo-machine blade vibration damper Patent			
[NASA-CASE-XLE-00155]	c28	N71-29154	
Corrosion resistant beryllium Patent			
[NASA-CASE-XLE-10327]	c17	N71-33408	
A protected isotope heat source			
[NASA-CASE-XLE-11227-1]	c33	N71-35153	
Attaching cover glasses to solar cells			
[NASA-CASE-XLE-11065-1]	c03	N72-11064	
Integrated thermoelectric generator/space antenna combination			
[NASA-CASE-XER-09521]	c09	N72-12136	
Sensing probe			
[NASA-CASE-XLE-10281-1]	c14	N72-17327	
Method of making emf cell			
[NASA-CASE-XLE-11359-2]	c03	N72-20034	
Gaseous control system for nuclear reactors			
[NASA-CASE-XLE-04599]	c22	N72-20597	
Switching regulator			
[NASA-CASE-XLE-11005-1]	c09	N72-21243	
Saturation current protection apparatus for saturable core transformers			
[NASA-CASE-ERC-10075-2]	c09	N72-22196	
Pulse coupling circuit			
[NASA-CASE-XLE-10433-1]	c09	N72-22197	
Solid state remote circuit selector switch			
[NASA-CASE-XLE-10387]	c09	N72-22201	
Load-insensitive electrical device			
[NASA-CASE-XER-11046]	c09	N72-22203	
High speed rolling element bearing			
[NASA-CASE-XLE-10856-1]	c15	N72-22490	
Production of metal powders			
[NASA-CASE-XLE-06461]	c17	N72-22530	
Nickel base alloy			
[NASA-CASE-XLE-10874-1]	c17	N72-22535	
Ion thruster magnetic field control			
[NASA-CASE-XLE-10835-1]	c28	N72-22771	
Electrically conductive fluorocarbon polymer			
[NASA-CASE-XLE-06774-2]	c06	N72-25150	
Analog Signal to Discrete Time Interval Converter (ASDTIC)			
[NASA-CASE-ERC-10048]	c09	N72-25251	
Controllable load insensitive power converters			
[NASA-CASE-ERC-10268]	c09	N72-25252	
Angular velocity and acceleration measuring apparatus			
[NASA-CASE-ERC-10292]	c14	N72-25410	
Hall effect magnetometer			
[NASA-CASE-XLE-11632-1]	c14	N72-25440	
Electrical insulating layer process			
[NASA-CASE-XLE-10489-1]	c15	N72-25447	
Method for producing dispersion strengthened alloys by converting metal to a halide, comminuting, reducing the metal halide to the metal and sintering			
[NASA-CASE-XLE-10450-1]	c15	N72-25448	
Selective nickel deposition			
[NASA-CASE-XLE-10965-1]	c15	N72-25452	
Method of making fiber composites			
[NASA-CASE-XLE-10424-2-2]	c18	N72-25539	
Electricity measurement devices employing liquid crystalline materials			
[NASA-CASE-ERC-10275]	c26	N72-25680	
Ablative system			
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Inductance device with vacuum insulation			
[NASA-CASE-XLE-10330-1]	c09	N72-27226	
Apparatus for sensing temperature			
[NASA-CASE-XLE-05230]	c14	N72-27410	
Thermocouple tape			
[NASA-CASE-XLE-11072-2]	c14	N72-28443	
Apparatus for producing metal powders			
[NASA-CASE-XLE-06461-2]	c17	N72-28535	
Refractory metal base alloy composites			
[NASA-CASE-XLE-03940-2]	c17	N72-28536	
Apparatus for producing high purity I-123			
[NASA-CASE-XLE-10518-2]	c24	N72-28714	
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[NASA-CASE-XLE-10326-2]	c15	N72-29488	
Production of high purity I-123			
[NASA-CASE-XLE-10518-1]	c24	N72-33681	
Electrostatic collector for charged particles			
[NASA-CASE-XLE-11192-1]	c09	N73-13208	
Method of making apparatus for sensing temperature			
[NASA-CASE-XLE-05230-2]	c14	N73-13417	
Method of forming superalloys			
[NASA-CASE-XLE-10805-1]	c15	N73-13465	
Rocket thrust throttling system			
[NASA-CASE-XLE-10374-1]	c28	N73-13773	
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[NASA-CASE-XLE-11187-1]	c28	N73-19793	
Method of producing I-123			
[NASA-CASE-XLE-11390-2]	c24	N73-20763	
Insulation foil and method of making			
[NASA-CASE-XLE-11484-1]	c15	N73-22415	
Improved coatings for refractory metals			
[NASA-CASE-XLE-11179-1]	c17	N73-22474	
Dished ion thruster grids			
[NASA-CASE-XLE-11694-1]	c28	N73-22721	
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[NASA-CASE-XLE-11072-1]	c14	N73-24472	
Method and apparatus for sputtering utilizing an apertured electrode and a pulsed substrate bias			
[NASA-CASE-XLE-10920-1]	c17	N73-24569	
Magneto-plasma-dynamic arc thruster			
[NASA-CASE-XLE-11180-1]	c25	N73-25760	
Controlled separation combustor			
[NASA-CASE-XLE-11593-1]	c28	N73-25816	
Ablative system			
[NASA-CASE-XLE-10359-2]	c33	N73-25952	
Covered silicon solar cells			
[NASA-CASE-XLE-11065-2]	c03	N73-26048	
Parasitic suppressing circuit			
[NASA-CASE-ERC-10403-1]	c10	N73-26228	
Twisted multifilament superconductor			
[NASA-CASE-XLE-11726-1]	c26	N73-26752	
Ophthalmic method and apparatus			
[NASA-CASE-XLE-11669-1]	c05	N73-27062	
Rocket propellant injection			
[NASA-CASE-XLE-11071-1]	c27	N73-27695	
Single grid accelerator for an ion thruster			
[NASA-CASE-XLE-10453-2]	c28	N73-27699	
Preparation of polyimides from mixtures of monomeric diamines and esters of polycarboxylic acids			
[NASA-CASE-XLE-11325-1]	c06	N73-27980	
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Method and apparatus for measuring electromagnetic radiation		[NASA-CASE-XLE-2529-3]	c09 N74-20859
[NASA-CASE-LEW-11159-1]	c14 N73-28488	Electromagnetic flow rate meter	
Welding blades to rotors		[NASA-CASE-LEW-10981-1]	c14 N74-21018
[NASA-CASE-LEW-10533-1]	c15 N73-28515	Diffusion welding	
An ion exchange nuclear reactor		[NASA-CASE-LEW-11388-2]	c15 N74-21055
[NASA-CASE-LEW-11645-2]	c22 N73-28660	Journal bearings	
High speed, self-acting shaft seal		[NASA-CASE-LEW-11076-1]	c15 N74-21061
[NASA-CASE-LEW-11274-1]	c15 N73-29457	Glass-to-metal seals comprising relatively high expansion metals	
Low mass rolling element for bearings		[NASA-CASE-LEW-10698-1]	c15 N74-21063
[NASA-CASE-LEW-11087-1]	c15 N73-30458	Hollow rolling element bearings	
Swirl can primary combustor		[NASA-CASE-LEW-11087-3]	c15 N74-21064
[NASA-CASE-LEW-11326-1]	c23 N73-30665	Low level signal limiter	
Ophthalmic liquefaction pump		[NASA-CASE-XLE-04791]	c14 N74-22096
[NASA-CASE-LEW-12051-1]	c04 N73-32000	Apparatus for forming dished ion thruster grids	
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High speed hybrid bearing comprising a fluid bearing and a rolling bearing connected in series		[NASA-CASE-XER-11046-2]	c09 N74-22864
[NASA-CASE-LEW-11152-1]	c15 N73-32359	Reinforced structural plastics	
Nickel aluminide coated low alloy stainless steel		[NASA-CASE-LEW-10199-1]	c18 N74-23125
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Cobalt-base alloy		[NASA-CASE-LEW-11915-1]	c12 N74-25805
[NASA-CASE-LEW-10436-1]	c17 N73-32415	Jet exhaust noise suppressor	
Nuclear fuel elements		[NASA-CASE-LEW-11286-1]	c02 N74-27490
[NASA-CASE-XLE-00209]	c22 N73-32528	High current electrical lead	
Method of fabricating a twisted composite superconductor		[NASA-CASE-LEW-10950-1]	c09 N74-27683
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[NASA-CASE-LEW-11101-1]	c31 N73-32750	Coating superalloys	
Production of hollow components for rolling element bearings by diffusion welding		[NASA-CASE-LEW-11696-3]	c17 N74-27963
[NASA-CASE-LEW-11026-1]	c15 N73-33383	Supersonic fan blading	
Electron beam controller		[NASA-CASE-LEW-11402-1]	c28 N74-28226
[NASA-CASE-LEW-11617-1]	c09 N74-10195	Rocket chamber and method of making	
Spiral groove seal		[NASA-CASE-LEW-11118-2]	c28 N74-28232
[NASA-CASE-LEW-10326-3]	c15 N74-10474	Production of pure metals	
Journal bearings		[NASA-CASE-LEW-10906-1]	c06 N74-30502
[NASA-CASE-LEW-11076-3]	c15 N74-10475	Sputtering holes with ion beamlets	
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Method of heat treating a formed powder product material		[NASA-CASE-LEW-11866-1]	c11 N74-32719
[NASA-CASE-LEW-10805-3]	c17 N74-10521	Method of electroforming a rocket chamber	
Apparatus for welding blades to rotors		[NASA-CASE-LEW-11118-1]	c15 N74-32919
[NASA-CASE-LEW-10533-2]	c15 N74-11300	Journal Bearings	
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Method of forming articles of manufacture from superalloy powders		[NASA-CASE-LEW-11549-1]	c03 N74-33484
[NASA-CASE-LEW-10805-2]	c15 N74-13179	Method of manufacturing composite superconductors	
Fine particulate capture device		[NASA-CASE-LEW-11582-1]	c09 N74-33739
[NASA-CASE-LEW-11583-1]	c15 N74-13199	Process for fabricating SiC semiconductor devices	
Deposition of alloy films		[NASA-CASE-LEW-12094-1]	c09 N74-33740
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Method of making silicon solar cell array		[NASA-CASE-LEW-12164-1]	c16 N74-34010
[NASA-CASE-LEW-11069-1]	c03 N74-14784	Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby	
Spiral groove seal		[NASA-CASE-LEW-12053-1]	c06 N74-34579
[NASA-CASE-XLE-10326-4]	c15 N74-15125	Process for making anhydrous metal halides	
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[NASA-CASE-LEW-11087-2]	c15 N74-15128	Hall effect magnetometer	
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Demodulator for carrier transducers		[NASA-CASE-LEW-11696-1]	c37 N75-13261
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Flow measuring apparatus		[NASA-CASE-LEW-11581-1]	c54 N75-13531
[NASA-CASE-LEW-12078-1]	c14 N74-18101	Insulation foil and method of making	
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Fabrication of polyphenylquinoxaline composite articles by means of in situ polymerization of monomers		[NASA-CASE-LEW-11694-1]	c20 N75-18310
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Rapidly pulsed, high intensity, incoherent light source		[NASA-CASE-LEW-11696-2]	c26 N75-19408
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Coupling device			
[NASA-CASE-XMS-07846-1]	c09	N69-21927	
Flow test device			
[NASA-CASE-XMS-04917]	c14	N69-24257	
Visual target for retrofire attitude control			
[NASA-CASE-XMS-12158-1]	c31	N69-27499	
System for monitoring signal amplitude ranges			
[NASA-CASE-XMS-04061-1]	c09	N69-39885	
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[NASA-CASE-XMS-05562-1]	c09	N69-39986	
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[NASA-CASE-XMS-04890-1]	c15	N70-22192	
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[NASA-CASE-XMS-00863]	c05	N70-34857	
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Inflatable radar reflector unit			
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Instrument for use in performing a controlled Valsalva maneuver			
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Radial module space station			
[NASA-CASE-XMS-01906]	c31	N70-41373	
Hypersonic reentry vehicle			
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Angular accelerometer			
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Cryogenic storage system			
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[NASA-CASE-XMS-03371]	c05	N70-42000	
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[NASA-CASE-XMS-01554]	c10	N71-10578	
Training vehicle for controlling attitude			
[NASA-CASE-XMS-02977]	c11	N71-10746	
Gravity stabilized flying vehicle			
[NASA-CASE-XMS-12111-1]	c02	N71-11039	
Helmet assembly and latch means therefor			
[NASA-CASE-XMS-04935]	c05	N71-11190	
Pressure suit tie-down mechanism			
[NASA-CASE-XMS-00784]	c05	N71-12335	
Hand-held self-maneuvering unit			
[NASA-CASE-XMS-05304]	c05	N71-12336	
Pressure garment joint			
[NASA-CASE-XMS-09636]	c05	N71-12344	
Emergency escape system			
[NASA-CASE-XMS-12086-1]	c05	N71-12345	
Dynamic Doppler simulator			
[NASA-CASE-XMS-05454-1]	c07	N71-12391	
Electrical load protection device			
[NASA-CASE-XMS-12135-1]	c09	N71-12526	
High voltage pulse generator			
[NASA-CASE-XMS-12178-1]	c09	N71-13518	
Process for conditioning tanned sharkskin and articles made therefrom			
[NASA-CASE-XMS-09691-1]	c18	N71-15545	
Ablation structures			
[NASA-CASE-XMS-01816]	c33	N71-15623	
Fluid power transmission			
[NASA-CASE-XMS-01445]	c12	N71-16031	
Spacecraft radiator cover			
[NASA-CASE-XMS-12049]	c31	N71-16080	
Method of improving heat transfer characteristics in a nucleate boiling process			
[NASA-CASE-XMS-04268]	c33	N71-16277	
Heated element fluid flow sensor			
[NASA-CASE-XMS-12084-1]	c12	N71-17569	
Biological isolation garment			
[NASA-CASE-XMS-12206-1]	c05	N71-17599	
Metal valve pintle with encapsulated elastomeric body			
[NASA-CASE-XMS-12116-1]	c15	N71-17648	
Method for forming plastic materials			
[NASA-CASE-XMS-05516]	c15	N71-17803	
Flexible blade antenna			
[NASA-CASE-XMS-12101]	c09	N71-18720	
Space suit heat exchanger			
[NASA-CASE-XMS-09571]	c05	N71-19439	
Light intensity modulator controller			
[NASA-CASE-XMS-04300]	c09	N71-19479	
Solar optical telescope dome control system			
[NASA-CASE-XMS-10966]	c14	N71-19568	
High temperature compositions			
[NASA-CASE-XMS-00370]	c17	N71-20941	
Radiation detector readout system			
[NASA-CASE-XMS-03478]	c14	N71-21040	
Subgravity simulator			
[NASA-CASE-XMS-04798]	c11	N71-21474	
Shock absorber			
[NASA-CASE-XMS-03722]	c15	N71-21530	
Apparatus for machining geometric cones			
[NASA-CASE-XMS-04292]	c15	N71-22722	
Rescue litter flotation assembly			
[NASA-CASE-XMS-04170]	c05	N71-22748	
Aligning and positioning device			
[NASA-CASE-XMS-04178]	c15	N71-22798	
Tension measurement device			
[NASA-CASE-XMS-04545]	c15	N71-22878	
Amplitude modulated laser transmitter			
[NASA-CASE-XMS-04269]	c16	N71-22895	
Digital cardiometer system			
[NASA-CASE-XMS-02399]	c05	N71-22896	
Phonocardiograph transducer			
[NASA-CASE-XMS-05365]	c14	N71-22993	
Multiple environment materials test chamber having a multiple port X-ray tube for irradiating a plurality of samples			
[NASA-CASE-XMS-02930]	c11	N71-23042	
Soft frame adjustable eyeglasses			
[NASA-CASE-XMS-06064]	c05	N71-23096	
Blood pressure measuring system for separating and separately recording dc signal and an ac signal			
[NASA-CASE-XMS-06061]	c05	N71-23317	
Signal ratio system utilizing voltage controlled oscillators			
[NASA-CASE-XMS-04367]	c09	N71-23545	
Winch having cable position and load indicators			
[NASA-CASE-XMS-12052-1]	c15	N71-24599	
Radar antenna system for acquisition and tracking			
[NASA-CASE-XMS-09610]	c07	N71-24625	
Extravehicular tunnel suit system			
[NASA-CASE-XMS-12243-1]	c05	N71-24728	
Broadband modified turnstile antenna			
[NASA-CASE-XMS-12209]	c09	N71-24842	
Quick release hook tape			
[NASA-CASE-XMS-10660-1]	c15	N71-25975	
Plated electrodes			
[NASA-CASE-XMS-04213-1]	c09	N71-26002	
Audio signal processor			
[NASA-CASE-XMS-12223-1]	c07	N71-26181	
Fabric for micrometeoroid protection garment			
[NASA-CASE-XMS-12109]	c18	N71-26285	
Antenna array phase quadrature tracking system			
[NASA-CASE-XMS-12205-1]	c07	N71-27056	
Radiometric temperature reference			
[NASA-CASE-XMS-13276-1]	c14	N71-27058	
Pneumatic amplifier			
[NASA-CASE-XMS-12121-1]	c15	N71-27147	
Orbital escape device			
[NASA-CASE-XMS-06162]	c31	N71-28851	
Inflatable tether			
[NASA-CASE-XMS-10993]	c15	N71-28936	
Ion-exchange membrane with platinum electrode assembly			
[NASA-CASE-XMS-02063]	c03	N71-29044	

Oxygen production method and apparatus [NASA-CASE-MSC-12332-1]	c15 N72-15476	Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient [NASA-CASE-ERC-10073-1]	c06 N74-19769
Color television system [NASA-CASE-MSC-12146-1]	c07 N72-17109	Analysis of volatile organic compounds [NASA-CASE-MSC-14428-1]	c06 N74-19776
Current dependent filter inductance [NASA-CASE-ERC-10139]	c09 N72-17154	Method of fluxless brazing and diffusion bonding of aluminum containing components [NASA-CASE-MSC-14435-1]	c15 N74-20071
Low onset rate energy absorber [NASA-CASE-MSC-12279]	c15 N72-17450	Pulse code modulated signal synchronizer [NASA-CASE-MSC-12462-1]	c07 N74-20809
Stand-off type ablative heat shield [NASA-CASE-MSC-12143-1]	c33 N72-17947	Pulse code modulated signal synchronizer [NASA-CASE-MSC-12494-1]	c07 N74-20810
Photographic film restoration system [NASA-CASE-MSC-12448-1]	c14 N72-20394	Apparatus and method for processing Korotkov sounds [NASA-CASE-MSC-13999-1]	c05 N74-26626
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Open type urine receptacle [NASA-CASE-MSC-12324-1]	c05 N72-22093	Technique for recovery of voice data from heat damaged magnetic tape [NASA-CASE-MSC-14219-1]	c07 N74-27612
Family of frequency to amplitude converters [NASA-CASE-MSC-12395]	c09 N72-25257	Differential phase shift keyed signal resolver [NASA-CASE-MSC-14066-1]	c10 N74-27705
Foldable construction block [NASA-CASE-MSC-12233-1]	c15 N72-25454	Specific wavelength colorimeter [NASA-CASE-MSC-14081-1]	c14 N74-27860
Method and apparatus for detecting surface ions on silicon diodes and transistors [NASA-CASE-ERC-10325]	c15 N72-25457	Latch mechanism [NASA-CASE-MSC-12549-1]	c15 N74-27903
Scientific experiment flexible mount [NASA-CASE-MSC-12372-1]	c31 N72-25842	Ceramic coating for silica insulation [NASA-CASE-MSC-14270-2]	c18 N74-30004
Burn rate testing apparatus [NASA-CASE-XMS-09690]	c33 N72-25913	Ceramic coating for silica insulation [NASA-CASE-MSC-14270-1]	c18 N74-30005
System for improving signal-to-noise ratio of a communication signal [NASA-CASE-MSC-12259-2]	c07 N72-33146	Digital communication system [NASA-CASE-MSC-13912-1]	c07 N74-30524
Altitude measuring system [NASA-CASE-ERC-10412-1]	c09 N73-12211	Auger attachment method for insulation [NASA-CASE-MSC-12615-1]	c15 N74-30916
A method of delivering a vehicle to earth orbit and returning the reusable portion thereof to earth [NASA-CASE-MSC-12391]	c30 N73-12884	Flexible joint for pressurizable garment [NASA-CASE-MSC-110/72]	c05 N74-32546
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Foldable construction block [NASA-CASE-MSC-12233-2]	c32 N73-13921	Method and apparatus for decoding compatible convolutional codes [NASA-CASE-MSC-14070-1]	c07 N74-32598
Space shuttle vehicle and system [NASA-CASE-MSC-12433]	c31 N73-14854	Field sequential stereo television [NASA-CASE-MSC-12616-1]	c07 N74-32601
Binary concatenated coding system [NASA-CASE-MSC-14082-1]	c08 N73-16163	Pulse stretcher for narrow pulses [NASA-CASE-MSC-14130-1]	c10 N74-32711
Binary concatenated coding system [NASA-CASE-MSC-14082-1]	c08 N73-16163	An optical process for producing classification maps from multispectral data [NASA-CASE-MSC-14472-1]	c13 N74-32780
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On-film optical recording of camera lens settings [NASA-CASE-MSC-12363-1]	c14 N73-26431	Planged major modular assembly jug [NASA-CASE-MSC-19372-1]	c37 N75-11351
Spacecraft docking and alignment system [NASA-CASE-MSC-12559-1]	c31 N73-26879	Pine frequency measurement by coincidence detection [NASA-CASE-MSC-14649-1]	c32 N75-13124
Powerplexer [NASA-CASE-MSC-12396-1]	c03 N73-31988	Fluid mass sensor [NASA-CASE-MSC-14653-1]	c35 N75-13218
Foot pedal operated fluid type exercising device [NASA-CASE-MSC-11561-1]	c05 N73-32014	Self-contained breathing apparatus [NASA-CASE-MSC-14733-1]	c54 N75-13534
Digital to analog conversion apparatus [NASA-CASE-MSC-12458-1]	c08 N73-32081	Automatic biowaste sampling [NASA-CASE-MSC-14640-1]	c54 N75-13536
Solid state controller three axes controller [NASA-CASE-MSC-12394-1]	c03 N74-10942	Anti-fog composition [NASA-CASE-MSC-13530-2]	c23 N75-14834
Method for obtaining oxygen from lunar or similar soil [NASA-CASE-MSC-12408-1]	c13 N74-13011	Four phase logic systems [NASA-CASE-MSC-14240-1]	c33 N75-14957
Adaptive voting computer system [NASA-CASE-MSC-13932-1]	c08 N74-14920	Sun angle calculator [NASA-CASE-MSC-12617-1]	c35 N75-15019
Position determination systems [NASA-CASE-MSC-12593-1]	c09 N74-14942	Lightweight electrically powered flexible thermal laminate [NASA-CASE-MSC-12662-1]	c24 N75-16635
Phase protection system for ac power lines [NASA-CASE-MSC-17832-1]	c10 N74-14956	Peak holding circuit for extremely narrow pulses [NASA-CASE-MSC-14129-1]	c33 N75-18479
Optical instruments [NASA-CASE-MSC-14096-1]	c14 N74-15095	Differential pulse code modulation [NASA-CASE-MSC-12506-1]	c32 N75-19480
Strain arrestor plate [NASA-CASE-MSC-14182-1]	c18 N74-15213	Random pulse generator [NASA-CASE-MSC-14131-1]	c33 N75-19515
Multifunction audio digitizer [NASA-CASE-MSC-13855-1]	c07 N74-17885	Grain refinement control in TIG arc welding [NASA-CASE-MSC-19095-1]	c37 N75-19683
Digital transmitter for data bus communications system [NASA-CASE-MSC-14558-1]	c07 N74-17888		

Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139

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MARSHALL SPACECRAFT CENTER, CAPE CANAVERAL, FLA.

Electrode for biological recording
[NASA-CASE-XMS-02872] c05 N69-21925

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MARSHALL SPACECRAFT CENTER, LANGLEY STATION, VA.

Plural recorder system
[NASA-CASE-XMS-06949] c09 N69-21467

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Electrical feed-through connection for printed
circuit boards and printed cable
[NASA-CASE-XMP-01483] c14 N69-27431

Method for detecting hydrogen gas
[NASA-CASE-XMP-03873] c06 N69-39733

Electrical connector Patent Application
[NASA-CASE-MPS-14741] c09 N70-20737

Angular measurement system Patent
[NASA-CASE-XMP-00447] c14 N70-33179

Insulating structure Patent
[NASA-CASE-XMP-00341] c15 N70-33323

Space vehicle electrical system Patent
[NASA-CASE-XMP-00517] c03 N70-34157

Pivotal shock absorbing pad assembly Patent
[NASA-CASE-XMP-03856] c31 N70-34159

Gimbaled, partially submerged rocket
nozzle Patent
[NASA-CASE-XMP-01544] c28 N70-34162

Recoverable rocket vehicle Patent
[NASA-CASE-XMP-00389] c31 N70-34176

Electrical discharge apparatus for forming Patent
[NASA-CASE-XMP-00375] c15 N70-34249

Optical inspection apparatus Patent
[NASA-CASE-XMP-00462] c14 N70-34298

Relay binary circuit Patent
[NASA-CASE-XMP-00421] c09 N70-34502

Attitude and propellant flow control system and
method Patent
[NASA-CASE-XMP-00185] c21 N70-34539

Electrical connector for flat cables Patent
[NASA-CASE-XMP-00324] c09 N70-34596

Externally pressurized fluid bearing Patent
[NASA-CASE-XMP-00515] c15 N70-34664

Force measuring instrument Patent
[NASA-CASE-XMP-00456] c14 N70-34705

Seismic displacement transducer Patent
[NASA-CASE-XMP-00479] c14 N70-34794

Electric arc welding Patent
[NASA-CASE-XMP-00392] c15 N70-34814

Assembly for recovering a capsule Patent
[NASA-CASE-XMP-00641] c31 N70-36410

Printed cable connector Patent
[NASA-CASE-XMP-00369] c09 N70-36494

Landing pad assembly for aerospace vehicles Patent
[NASA-CASE-XMP-02853] c31 N70-36654

Electric arc driven wind tunnel Patent
[NASA-CASE-XMP-00411] c11 N70-36913

Gravity device Patent
[NASA-CASE-XMP-00424] c11 N70-38196

Injector for bipropellant rocket engines Patent
[NASA-CASE-XMP-00148] c28 N70-38710

Electronic motor control system Patent
[NASA-CASE-XMP-01129] c09 N70-38712

Slosh suppressing device and method Patent
[NASA-CASE-XMP-00658] c12 N70-38997

Air bearing Patent
[NASA-CASE-XMP-00339] c15 N70-39896

Instrument support with precise lateral
adjustment Patent
[NASA-CASE-XMP-00480] c14 N70-39898

Segmented back-up bar Patent
[NASA-CASE-XMP-00640] c15 N70-39924

Collapsible loop antenna for space vehicle Patent
[NASA-CASE-XMP-00437] c07 N70-40202

Flexible back-up bar Patent
[NASA-CASE-XMP-00722] c15 N70-40204

Electro-optical alignment control system Patent
[NASA-CASE-XMP-00908] c14 N70-40238

Missile launch release system Patent
[NASA-CASE-XMP-03198] c30 N70-40353

Double-acting shock absorber Patent
[NASA-CASE-XMP-01045] c15 N70-40354

Portable alignment tool Patent
[NASA-CASE-XMP-01452] c15 N70-41371

Device for suppressing sound and heat produced
by high-velocity exhaust jets Patent
[NASA-CASE-XMP-01813] c28 N70-41582

Unfired-ceramic flame-resistant insulation and
method of making the same Patent
[NASA-CASE-XMP-01030] c18 N70-41583

Pulse counting circuit which simultaneously
indicates the occurrence of the nth pulse Patent
[NASA-CASE-XMP-00906] c09 N70-41655

Support apparatus for dynamic testing Patent
[NASA-CASE-XMP-01772] c11 N70-41677

Locking device with rolling detents Patent
[NASA-CASE-XMP-01371] c15 N70-41829

Tank construction for space vehicles Patent
[NASA-CASE-XMP-01899] c31 N70-41948

Accumulator Patent Application
[NASA-CASE-MPS-10354] c12 N70-41976

Positive displacement flowmeter Patent
[NASA-CASE-XMP-02822] c14 N70-41994

Hydraulic support for dynamic testing Patent
[NASA-CASE-XMP-03248] c11 N71-10604

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Patent
[NASA-CASE-XMP-02433] c14 N71-10616

Method and means for damping nutation in a
satellite Patent
[NASA-CASE-XMP-00442] c31 N71-10747

Heat pipe thermionic diode power system Patent
[NASA-CASE-XMP-05843] c03 N71-11055

Synthesis of siloxane-containing epoxy polymers
Patent
[NASA-CASE-MPS-13994-1] c06 N71-11240

Bi-carrier demodulator with modulation Patent
[NASA-CASE-XMP-01160] c07 N71-11298

Harness assembly Patent
[NASA-CASE-MPS-14671] c05 N71-12341

Magnetic matrix memory system Patent
[NASA-CASE-XMP-05835] c08 N71-12504

Pulse amplitude and width detector Patent
[NASA-CASE-XMP-06519] c09 N71-12519

Microwave power receiving antenna Patent
[NASA-CASE-MPS-20333] c09 N71-13486

Hybrid holographic system using reflected and
transmitted object beams simultaneously Patent
[NASA-CASE-MPS-20074] c16 N71-15565

Reactance control system Patent
[NASA-CASE-XMP-01598] c21 N71-15583

Apparatus for welding torch angle and seam
tracking control Patent
[NASA-CASE-XMP-03287] c15 N71-15607

Multivay vortex valve system Patent
[NASA-CASE-XMP-04709] c15 N71-15609

Injector assembly for liquid fueled rocket
engines Patent
[NASA-CASE-XMP-00968] c28 N71-15660

Space capsule ejection assembly Patent
[NASA-CASE-XMP-03169] c31 N71-15675

Air cushion lift pad Patent
[NASA-CASE-MPS-14685] c31 N71-15689

Method of making a molded connector Patent
[NASA-CASE-XMP-03498] c15 N71-15986

Regenerative braking system Patent
[NASA-CASE-XMP-01096] c10 N71-16030

Condition and condition duration indicator Patent
[NASA-CASE-XMP-01097] c10 N71-16058

Method and apparatus for securing to a
spacecraft Patent
[NASA-CASE-MPS-11133] c31 N71-16222

Method and apparatus of simulating zero gravity
conditions Patent
[NASA-CASE-MPS-12750] c27 N71-16223

Passive optical wind and turbulence detection
system Patent
[NASA-CASE-XMP-14032] c20 N71-16340

Serpentuator Patent
[NASA-CASE-XMP-05344] c31 N71-16345

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[NASA-CASE-XMP-05844] c14 N71-17587

High pressure gas filter system Patent
[NASA-CASE-MPS-12806] c14 N71-17588

Burst diaphragm flow initiator Patent
[NASA-CASE-MPS-12915] c11 N71-17600

Vacuum deposition apparatus Patent
[NASA-CASE-XMP-01667] c15 N71-17647

Quick disconnect latch and handle combination
Patent
[NASA-CASE-MPS-11132] c15 N71-17649

Method and apparatus for precision sizing and
joining of large diameter tubes Patent
[NASA-CASE-XMP-05114] c15 N71-17650

Low temperature flexure fatigue cryostat Patent
[NASA-CASE-XMP-02964] c14 N71-17659

Precision stepping drive Patent
[NASA-CASE-MPS-14772] c15 N71-17692

Multi-mission module Patent
[NASA-CASE-XMP-01543] c31 N71-17730

Ratchet mechanism Patent
[NASA-CASE-MPS-12805] c15 N71-17805

Method of making impurity-type semiconductor electrical contacts Patent
[NASA-CASE-XMP-01016] c26 N71-17818

Apparatus for the determination of the existence or non-existence of a bonding between two members Patent
[NASA-CASE-MPS-13686] c15 N71-18132

Static inverters which sum a plurality of waves Patent
[NASA-CASE-XMP-00663] c08 N71-18752

Space environmental work simulator Patent
[NASA-CASE-XMP-07488] c11 N71-18773

Space manufacturing machine Patent
[NASA-CASE-MPS-20410] c15 N71-19214

Extensometer Patent
[NASA-CASE-XMP-04680] c15 N71-19489

Mechanical simulator of low gravity conditions Patent
[NASA-CASE-MPS-10555] c11 N71-19494

Weld control system using thermocouple wire Patent
[NASA-CASE-MPS-06074] c15 N71-20393

Evaporant source for vapor deposition Patent
[NASA-CASE-XMP-06065] c15 N71-20395

Satellite despin device Patent
[NASA-CASE-XMP-08523] c31 N71-20396

Method of coating circuit paths on printed circuit boards with solder Patent
[NASA-CASE-XMP-01599] c09 N71-20705

Elastomeric silazane polymers and process for preparing the same Patent
[NASA-CASE-XMP-04133] c06 N71-20717

Method of producing alternating ether siloxane copolymers Patent
[NASA-CASE-XMP-02584] c06 N71-20905

Honeycomb panel and method of making same Patent
[NASA-CASE-XMP-01402] c18 N71-21651

Portable milling tool Patent
[NASA-CASE-XMP-03511] c15 N71-22799

Energy absorbing device Patent
[NASA-CASE-XMP-10040] c15 N71-22877

Continuous detonation reaction engine Patent
[NASA-CASE-XMP-06926] c28 N71-22983

Adaptive tracking notch filter system Patent
[NASA-CASE-XMP-01892] c10 N71-22986

Meteorological balloon Patent
[NASA-CASE-XMP-04163] c02 N71-23007

Continuous turning slip ring assembly Patent
[NASA-CASE-XMP-01049] c15 N71-23049

Automatic welding speed controller Patent
[NASA-CASE-XMP-01730] c15 N71-23050

Positive dc to positive dc converter Patent
[NASA-CASE-XMP-14301] c09 N71-23188

Zero gravity apparatus Patent
[NASA-CASE-XMP-06515] c14 N71-23227

Positive dc to negative dc converter Patent
[NASA-CASE-XMP-08217] c03 N71-23239

Evacuation port seal Patent
[NASA-CASE-XMP-03290] c15 N71-23256

Azimuth laying system Patent
[NASA-CASE-XMP-01669] c21 N71-23289

Electron beam instrument for measuring electric fields Patent
[NASA-CASE-XMP-10289] c14 N71-23699

Anemometer with braking mechanism Patent
[NASA-CASE-XMP-05224] c14 N71-23726

Apparatus for testing a pressure responsive instrument Patent
[NASA-CASE-XMP-04134] c14 N71-23755

Electric welding torch Patent
[NASA-CASE-XMP-02330] c15 N71-23798

Swivel support for gas bearings Patent
[NASA-CASE-XMP-07808] c15 N71-23812

Welding skate with computerized control Patent
[NASA-CASE-XMP-07069] c15 N71-23815

Docking structure for spacecraft Patent
[NASA-CASE-XMP-05941] c31 N71-23912

High pressure helium purifier Patent
[NASA-CASE-XMP-06888] c15 N71-24044

Horizontal cryostat for fatigue testing Patent
[NASA-CASE-XMP-10968] c14 N71-24234

Method for leakage testing of tanks Patent
[NASA-CASE-XMP-02392] c32 N71-24285

Internal flare angle gauge Patent
[NASA-CASE-XMP-04415] c14 N71-24693

Pulse rise time and amplitude detector Patent
[NASA-CASE-XMP-08804] c09 N71-24717

System for maintaining a motor at a predetermined speed utilizing digital feedback means Patent
[NASA-CASE-XMP-06892] c09 N71-24805

Power system with heat pipe liquid coolant lines Patent
[NASA-CASE-MPS-14114-2] c09 N71-24807

Magnetomotive metal working device Patent
[NASA-CASE-XMP-03793] c15 N71-24833

Apparatus for determining the deflection of an electron beam impinging on a target Patent
[NASA-CASE-XMP-06617] c09 N71-24843

Transistor servo system including a unique differential amplifier circuit Patent
[NASA-CASE-XMP-05195] c10 N71-24861

RC rate generator for slow speed measurement Patent
[NASA-CASE-XMP-02966] c10 N71-24863

Method and apparatus for precision sizing and joining of large diameter tubes Patent
[NASA-CASE-XMP-05114-3] c15 N71-24865

Duct coupling for single-handed operation Patent
[NASA-CASE-MPS-20395] c15 N71-24903

Brushless direct current tachometer Patent
[NASA-CASE-MPS-20385] c09 N71-24904

Self-lubricating gears and other mechanical parts Patent
[NASA-CASE-MPS-14971] c15 N71-24984

Pulse width inverter Patent
[NASA-CASE-MPS-10068] c10 N71-25139

Isothermal cover with thermal reservoirs Patent
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[NASA-CASE-NPO-13201-1]	c37	N75-15050	
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[NASA-CASE-NPO-12119-1]	c52	N75-15270	
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[NASA-CASE-NPO-13292-1]	c32	N75-15854	
The dc-to-dc converters employing staggered phase power switches with two loop control			
[NASA-CASE-NPO-13512-1]	c33	N75-15876	
Soft X-ray laser using crystal channels as distributed feedback cavities			
[NASA-CASE-NPO-13532-1]	c36	N75-15973	
Diffused waveguiding capillary tube with distributed feedback for a gas laser			
[NASA-CASE-NPO-13544-1]	c36	N75-15974	
Method and apparatus for generating coherent radiation in the ultraviolet region and above by use of distributed feedback			
[NASA-CASE-NPO-13346-1]	c70	N75-16307	
The 3-5 photocathode with nitrogen doping for increased quantum efficiency			
[NASA-CASE-NPO-12134-1]	c33	N75-16745	
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[NASA-CASE-NPO-13677-1]	c35	N75-16791	
Wind sensor			
[NASA-CASE-NPO-13462-1]	c35	N75-16807	
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[NASA-CASE-NPO-13490-1]	c36	N75-16827	
Low to high temperature energy conversion system			
[NASA-CASE-NPO-13510-1]	c44	N75-16972	
Miniature muscle displacement transducer			
[NASA-CASE-NPO-13519-1]	c54	N75-17102	
Shock absorbing mount for electrical components			
[NASA-CASE-NPO-13253-1]	c37	N75-18573	
System for generating timing and control signals			
[NASA-CASE-NPO-13125-1]	c33	N75-19519	
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[NASA-CASE-NPO-13374-1]	c33	N75-19524	
Frequency scanning particle size spectrometer			
[NASA-CASE-NPO-13606-1]	c35	N75-19627	
Particle size spectrometer and refractometer			
[NASA-CASE-NPO-13614-1]	c35	N75-19628	
Deep trap, laser activated image converting system			
[NASA-CASE-NPO-13131-1]	c36	N75-19652	
Multitarget sequential sputtering apparatus			
[NASA-CASE-NPO-13345-1]	c37	N75-19684	
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, WESTERN OPERATIONS OFFICE, SANTA MONICA, CALIF.			
Automatic pump Patent			
[NASA-CASE-XNP-04731]	c15	N71-24042	
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, WASHINGTON, D.C.			
Optical spin compensator			
[NASA-CASE-XGS-02401]	c14	N69-27485	
Waveguide mixer			
[NASA-CASE-ERC-10179]	c07	N72-20141	
Semiconductor-ferroelectric memory device			
[NASA-CASE-ERC-10307]	c08	N72-21198	
Shielded cathode mode bulk effect devices			
[NASA-CASE-ERC-10119]	c26	N72-21701	
Fabrication of single crystal film semiconductor devices			
[NASA-CASE-ERC-10222]	c09	N72-22199	
Two color horizon sensor			
[NASA-CASE-ERC-10174]	c14	N72-25409	
Ultraviolet atomic emission detector			
[NASA-CASE-HQN-10756-1]	c14	N72-25428	
Optical pump and driver system for lasers			
[NASA-CASE-ERC-10283]	c16	N72-25485	
Clear air turbulence detector			
[NASA-CASE-ERC-10081]	c14	N72-28437	
Head-up attitude display			
[NASA-CASE-ERC-10392]	c21	N73-14692	
System for indicating direction of intruder aircraft			
[NASA-CASE-ERC-10226-1]	c14	N73-16483	
Aircraft control system			
[NASA-CASE-ERC-10439]	c02	N73-19004	
Display system			
[NASA-CASE-ERC-10350]	c14	N73-20474	
Method and apparatus for measuring solar activity and atmospheric radiation effects			
[NASA-CASE-ERC-10276]	c14	N73-26432	
Doppler shift system			
[NASA-CASE-HQN-10740-1]	c24	N74-19310	
Auditory display for the blind			
[NASA-CASE-HQN-10832-1]	c14	N74-21014	
Resistive anode image converter			
[NASA-CASE-HQN-10876-1]	c35	N75-19621	
Laser system with an antiresonant optical ring			
[NASA-CASE-HQN-10844-1]	c36	N75-19653	
NATIONAL BUREAU OF STANDARDS, BOULDER, COLO.			
Densitometer Patent			
[NASA-CASE-XLE-00688]	c14	N70-41330	
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, BOULDER, COLO.			
Determining distance to lightning strokes from a single station			
[NASA-CASE-KSC-10698]	c07	N73-20175	
NATIONAL RESEARCH CORP., CAMBRIDGE, MASS.			
Gauge calibration by diffusion			
[NASA-CASE-XGS-07752]	c14	N73-30390	
Ultrahigh vacuum measuring ionization gauge			
[NASA-CASE-XLA-05087]	c14	N73-30391	
Apparatus for absolute pressure measurement			
[NASA-CASE-LAR-10000]	c14	N73-30394	
Ultrahigh vacuum gauge having two collector electrodes			
[NASA-CASE-LAR-02743]	c14	N73-32324	
Rock sampling			
[NASA-CASE-XNP-10007-1]	c15	N74-23068	
Rock sampling			
[NASA-CASE-XNP-09755]	c15	N74-23069	
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Method of growing composites of the type exhibiting the Soret effect			
[NASA-CASE-MFS-22926-1]	c25	N75-19380	
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Method of joining aluminum to stainless steel Patent			
[NASA-CASE-MFS-07369]	c15	N71-20443	
Propellant mass distribution metering apparatus Patent			
[NASA-CASE-NPO-10185]	c10	N71-26339	
Safety-type locking pin			
[NASA-CASE-MFS-18495]	c15	N72-11385	
Hydrogen fire detection system with logic circuit to analyze the spectrum of temporal variations of the optical spectrum			
[NASA-CASE-MFS-13130]	c10	N72-17173	
NORTH AMERICAN AVIATION, INC., DOWNEY, CALIF.			
Heat shield oven			
[NASA-CASE-XMS-04318]	c15	N69-27871	
Extensible cable support Patent			
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High pressure air valve Patent			
[NASA-CASE-MSC-11010]	c15	N71-19485	
Load relieving device Patent			
[NASA-CASE-XMS-06329-1]	c15	N71-20441	
Optical projector system Patent			
[NASA-CASE-XNP-03853]	c23	N71-21882	
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[NASA-CASE-XNP-03063]	c17	N71-23365	
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Aerodynamic spike nozzle Patent			
[NASA-CASE-XGS-01143]	c31	N71-15647	
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Radio frequency shielded enclosure Patent			
[NASA-CASE-XMF-09422]	c07	N71-19436	
High impedance measuring apparatus Patent			
[NASA-CASE-XMS-08589-1]	c09	N71-20569	
Latching mechanism Patent			
[NASA-CASE-XMS-03745]	c15	N71-21076	
Tube dimpling tool Patent			
[NASA-CASE-XMS-06876]	c15	N71-21536	
Positive locking check valve Patent			
[NASA-CASE-XMS-09310]	c15	N71-22706	
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- Purge device for thrust engines Patent
[NASA-CASE-XMS-04826] c28 N71-28849
- Method and construction for protecting heat sensitive bodies from thermal radiation and convective heat Patent
[NASA-CASE-XNP-01310] c33 N71-28852
- Propellant tank pressurization system Patent
[NASA-CASE-XNP-00650] c27 N71-28929
- Spherical shield Patent
[NASA-CASE-XNP-01855] c15 N71-28937
- Universal restrainer and joint Patent
[NASA-CASE-XNP-02278] c15 N71-28951
- Method and device for cooling Patent
[NASA-CASE-HQN-00938] c33 N71-29053
- NORTH AMERICAN AVIATION, INC., LOS ANGELES, CALIF.**
Method and system for respiration analysis Patent
[NASA-CASE-XPR-08403] c05 N71-11202
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Method and apparatus for detection and location of microleaks Patent
[NASA-CASE-XNP-02307] c14 N71-10779
- NORTH AMERICAN ROCKWELL CORP., CANOGA PARK, CALIF.**
Noncontaminating swabs
[NASA-CASE-MPS-18100] c15 N72-11390
- Observation window for a gas confining chamber
[NASA-CASE-NPO-10890] c11 N73-12265
- Droplet monitoring probe
[NASA-CASE-NPO-10985] c14 N73-20478
- Circuit board package with wedge shaped covers
[NASA-CASE-MPS-21919-1] c10 N73-25243
- Heat flow calorimeter
[NASA-CASE-GSC-11434-1] c14 N74-27859
- NORTH AMERICAN ROCKWELL CORP., DOWNNEY, CALIF.**
Spacecraft Patent
[NASA-CASE-MSC-13047-1] c31 N71-25434
- Latching mechanism Patent
[NASA-CASE-MSC-15474-1] c15 N71-26162
- Dye penetrant for surfaces subsequently contacted by liquid oxygen Patent
[NASA-CASE-XNP-02221] c18 N71-27170
- Frangible link
[NASA-CASE-MSC-11849-1] c15 N72-22488
- Impact monitoring apparatus
[NASA-CASE-MSC-15626-1] c14 N72-25411
- Bonding or repairing process
[NASA-CASE-MSC-12357] c15 N73-12489
- Self-cycling fluid heater
[NASA-CASE-MSC-15567-1] c33 N73-16918
- Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c10 N74-14956
- Apparatus for remote handling of materials
[NASA-CASE-LAR-10634-1] c15 N74-18123
- Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c15 N74-32926
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- NORTH AMERICAN ROCKWELL CORP., EL SEGUNDO, CALIF.**
Apparatus for testing wiring harness by vibration generating means
[NASA-CASE-MSC-15158-1] c14 N72-17325
- NORTH AMERICAN ROCKWELL CORP., LOS ANGELES, CALIF.**
Tactile sensing means for prosthetic limbs
[NASA-CASE-MPS-16570-1] c05 N73-32013
- NORTH CAROLINA STATE UNIV., RALEIGH.**
Thermal shock resistant hafnia ceramic material
[NASA-CASE-LAR-10894-1] c18 N73-14584
- NORTHEASTERN UNIV., BOSTON, MASS.**
Pulse-width modulation multiplier Patent
[NASA-CASE-XER-09213] c07 N71-12390
- NORTHBOP CORP., HAWTHORNE, CALIF.**
Shock tube bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245
- NORTHBOP ELECTRONICS, PALOS VERDES PENINSULA, CALIF.**
Method of making dry electrodes
[NASA-CASE-FRC-10029-2] c05 N72-25121
- Valve seat
[NASA-CASE-NPO-10606] c15 N72-25451
- NORTHBOP SPACE LABS., HAWTHORNE, CALIF.**
Method of evaluating moisture barrier properties of encapsulating materials Patent
[NASA-CASE-NPO-10051] c18 N71-24934
- NORTONICS, PALOS VERDES PENINSULA, CALIF.**
Flexible conductive disc electrode Patent
[NASA-CASE-FRC-10029] c09 N71-24618
- Gas low pressure low flow rate metering system Patent
[NASA-CASE-FRC-10022] c12 N71-26546
- Method of removing insulated material from insulated wires
[NASA-CASE-FRC-10038] c15 N72-20444
- NOTRE DAME UNIV., IND.**
Synthesis of polymeric schiff bases by schiff-base exchange reactions Patent
[NASA-CASE-XNF-08651] c06 N71-11236
- Direct synthesis of polymeric schiff bases from two amines and two aldehydes Patent
[NASA-CASE-XNF-08655] c06 N71-11239
- Azine polymers and process for preparing the same Patent
[NASA-CASE-XNF-08656] c06 N71-11242
- Synthesis of polymeric schiff bases by reaction of acetals and amine compounds Patent
[NASA-CASE-XNF-08652] c06 N71-11243
- Aromatic diamine-aromatic dialdehyde high molecular weight Schiff base polymers prepared in a monofunctional Schiff base Patent
[NASA-CASE-XNF-03074] c06 N71-24740
- OAKLAND UNIV., ROCHESTER, MICH.**
An optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c13 N74-32780
- OHIO STATE UNIV., COLUMBUS.**
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c09 N74-29575
- PACKARD-BELL ELECTRONICS CORP., NEWBURY PARK, CALIF.**
Optical alignment system Patent
[NASA-CASE-XNP-02029] c14 N70-41955
- PANAUORA CORP., PENNSAUKEN, N.J.**
Method of forming transparent films of ZnO
[NASA-CASE-FRC-10019] c15 N73-12487
- PENINSULAR CHEMERESEARCH, INC., GAINESVILLE, FLA.**
Hydroxy terminated perfluoro ethers Patent
[NASA-CASE-NPO-10768] c06 N71-27254
- Perfluoro polyether acyl fluorides
[NASA-CASE-NPO-10765] c06 N72-20121
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[NASA-CASE-NPO-10768-2] c06 N72-27144
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- Highly fluorinated polyurethanes
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- PHILCO-FORD CORP., HOUSTON, TEX.**
Frequency modulation demodulator threshold extension device Patent
[NASA-CASE-MSC-12165-1] c07 N71-33696
- PHILCO-FORD CORP., NEWPORT BEACH, CALIF.**
Mechanically extendible telescoping boom
[NASA-CASE-NPO-11118] c03 N72-25021
- PHILCO-FORD CORP., PALO ALTO, CALIF.**
Composite antenna feed
[NASA-CASE-GSC-11046-1] c07 N73-28013
- Amplitude steered array
[NASA-CASE-GSC-11446-1] c09 N74-20860
- PRATT AND WHITNEY AIRCRAFT, EAST HARTFORD, CONN.**
Liquid-gas separation system Patent
[NASA-CASE-XMS-01624] c15 N70-40062
- Vibration damping system Patent
[NASA-CASE-XMS-01620] c23 N71-15673
- Vapor pressure measuring system and method Patent
[NASA-CASE-XMS-01618] c14 N71-20741
- Sealing member and combination thereof and method of producing said sealing member Patent
[NASA-CASE-XMS-01625] c15 N71-23022
- QUANTUM DYNAMICS, TARZANA, CALIF.**
Respiratory analysis system and method
[NASA-CASE-MSC-13436-1] c05 N73-32015
- RADIATION INSTRUMENT DEVELOPMENT LAB., INC., MELROSE PARK, ILL.**
High speed binary to decimal conversion system Patent

[NASA-CASE-XGS-01230]	c08 N71-19544	RENSSELAER POLYTECHNIC INST., TROY, N.Y.	
RADIATION SYSTEMS, INC., MCLEAN, VA.		Coincidence apparatus for detecting particles	
" Monopulse tracking system Patent		[NASA-CASE-XLA-07813]	c14 N72-17328
[NASA-CASE-XGS-01155]	c10 N71-21483	RESEARCH TRIANGLE INST., DURHAM, N.C.	
RADIATION, INC., MELBOURNE, FLA.		Semiconductor p-n junction stress and strain sensor	
Remote platform power conserving system		[NASA-CASE-XLA-04980]	c09 N69-27422
[NASA-CASE-GSC-11182-1]	c15 N75-13007	RESEARCH TRIANGLE INST., RESEARCH TRIANGLE PARK, N.C.	
RADIO CORP. OF AMERICA, LANCASTER, PA.		Particulate and aerosol detector	
Bonding graphite with fused silver chloride		[NASA-CASE-LAR-11434-1]	c14 N74-22112
[NASA-CASE-XGS-00963]	c15 N69-39735	ROCHESTER UNIV., N.Y.	
RADIO CORP. OF AMERICA, NEW YORK.		Concave grating spectrometer Patent	
Water cooled contactor for anode in carbon arc mechanism		[NASA-CASE-XGS-01036]	c14 N70-40003
[NASA-CASE-XMS-03700]	c15 N69-24266	ROCKEFORDYNE, CANOGA PARK, CALIF.	
Apparatus for ballasting high frequency transistors		Frequency to analog converter Patent	
[NASA-CASE-XGS-05003]	c09 N69-24318	[NASA-CASE-XNP-07040]	c08 N71-12500
Helical coaxial resonator RF filter		Load cell protection device Patent	
[NASA-CASE-XGS-02816]	c07 N69-24323	[NASA-CASE-XMS-06782]	c32 N71-15974
Radiation resistant silicon semiconductor devices Patent		Thermobulb mount Patent	
[NASA-CASE-XGS-07801]	c09 N71-12513	[NASA-CASE-NPO-10158]	c33 N71-16356
GaAs solar detector using manganese as a doping agent Patent		Laminar flow enhancement Patent	
[NASA-CASE-XNP-01328]	c26 N71-18064	[NASA-CASE-NPO-10422]	c12 N71-17631
Thermocouple assembly Patent		Temperature sensitive flow regulator Patent	
[NASA-CASE-XNP-01659]	c14 N71-23039	[NASA-CASE-MFS-14259]	c15 N71-19213
Method of erasing target material of a vidicon tube or the like Patent		Hydrogen leak detection device Patent	
[NASA-CASE-XNP-06028]	c09 N71-23189	[NASA-CASE-MFS-11537]	c14 N71-20442
Transient augmentation circuit for pulse amplifiers Patent		Technique of elbow bending small jacketed transfer lines Patent	
[NASA-CASE-XNP-01068]	c10 N71-28739	[NASA-CASE-XNP-10475]	c15 N71-24679
RADIO CORP. OF AMERICA, PRINCETON, N.J.		Gas liquefaction and dispensing apparatus Patent	
Connector strips-positive, negative and T tabs		[NASA-CASE-NPO-10070]	c15 N71-27372
[NASA-CASE-XGS-01395]	c03 N69-21539	Locking device for turbine rotor blades Patent	
Solar cell including second surface mirrors Patent		[NASA-CASE-XNP-00816]	c28 N71-28928
[NASA-CASE-NPO-10109]	c03 N71-11049	Laser camera and diffusion filter therefore Patent	
Collapsible reflector Patent		[NASA-CASE-NPO-10417]	c16 N71-33410
[NASA-CASE-XMS-03454]	c09 N71-20658	Hydrazinium nitroformate propellant stabilized with nitroguanidine	
Simple method of making photovoltaic junctions Patent		[NASA-CASE-NPO-12000]	c27 N72-25699
[NASA-CASE-XNP-01960]	c09 N71-23027	Hydrazinium nitroformate propellant with saturated polymeric hydrocarbon binder	
Method of electrolytically binding a layer of semiconductors together Patent		[NASA-CASE-NPO-12015]	c27 N73-16764
[NASA-CASE-XNP-01959]	c26 N71-23043	Novel polymers and method of preparing same	
Method and apparatus for distillation of liquids Patent		[NASA-CASE-NPO-10998-1]	c06 N73-32029
[NASA-CASE-XNP-08124]	c15 N71-27184	An externally supported internally stabilized flexible duct joint	
Maximum power point tracker Patent		[NASA-CASE-MFS-19194-1]	c15 N74-34882
[NASA-CASE-GSC-10376-1]	c14 N71-27407	Internally supported flexible duct joint	
Method of changing the conductivity of vapor deposited gallium arsenide by the introduction of water into the vapor deposition atmosphere Patent		[NASA-CASE-MFS-19193-1]	c37 N75-19686
[NASA-CASE-XNP-01961]	c26 N71-29156	ROCKWELL INTERNATIONAL CORP., CANOGA PARK, CALIF.	
Radial heat flux transformer		Aircraft mounted crash activated transmitter device	
[NASA-CASE-NPO-10828]	c33 N72-17948	[NASA-CASE-MFS-16609-3]	c09 N74-34647
Target acquisition antenna		Method and apparatus for detecting flaws in elongated bodies	
[NASA-CASE-GSC-10064-1]	c10 N72-22235	[NASA-CASE-MFS-19218-1]	c14 N74-34860
Method for distillation of liquids		ROCKWELL INTERNATIONAL CORP., DOWNNEY, CALIF.	
[NASA-CASE-XNP-08124-2]	c06 N73-13129	Planned major modular assembly jug	
Hermetically sealed semiconductor		[NASA-CASE-MSC-19372-1]	c37 N75-11351
[NASA-CASE-GSC-10791-1]	c15 N73-14469	ROPH CORP., CHULA VISTA, CALIF.	
Thermal flux transfer system		Method of forming shapes from planar sheets of thermosetting materials	
[NASA-CASE-NPO-12070-1]	c28 N73-32606	[NASA-CASE-NPO-11036]	c15 N72-24522
Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly		ROYAL AIRCRAFT ESTABLISHMENT, FARNBOROUGH (ENGLAND).	
[NASA-CASE-GSC-11560-1]	c09 N74-20861	Garments for controlling the temperature of the body Patent	
Fine frequency measurement by coincidence detection		[NASA-CASE-XMS-10269]	c05 N71-24147
[NASA-CASE-MSC-14649-1]	c32 N75-13124	RYAN AERONAUTICAL CO., SAN DIEGO, CALIF.	
Preload torque limiting shaft coupling		Wing deployment method and apparatus Patent	
[NASA-CASE-LAR-11398-1]	c37 N75-15994	[NASA-CASE-XMS-00907]	c02 N70-41630
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Synchronous servo loop control system Patent			
[NASA-CASE-XNP-03744]	c10 N71-20448		
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Laser Doppler system for measuring three dimensional vector velocity Patent			
[NASA-CASE-MFS-20386]	c21 N71-19212		
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Apparatus for inspecting microfilm Patent			
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regulator circuits Patent	
[NASA-CASE-XMS-09352]	c09 N71-23316
SANTA CLARA UNIV., CALIF.	
Reversed cowl flap inlet thrust augmentor	
[NASA-CASE-ARC-10754-1]	c28 N73-32624
System for measuring Reynolds stress in a	
turbulently flowing fluid	
[NASA-CASE-ARC-10755-2]	c34 N75-16770
SCHJELDahl (G. T.) CO., NORTHFIELD, MINN.	
Rotating mandrel for assembly of inflatable	
devices Patent	
[NASA-CASE-XLA-04443]	c15 N71-17687

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[NASA-CASE-XLA-01494] c15 N71-24164

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Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N75-13534

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[NASA-CASE-KSC-10647-1] c10 N72-31273

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[NASA-CASE-XMP-00701] c09 N70-40272

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Atomic hydrogen maser with bulb temperature control to remove wall shift in maser output frequency
[NASA-CASE-HQN-10654-1] c16 N73-13489

Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-10790-1] c16 N74-11313

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Biomedical radiation detecting probe Patent
[NASA-CASE-XMS-01177] c05 N71-19440

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Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054

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[NASA-CASE-HQN-10740-1] c24 N74-19310

SPACE TECHNOLOGY LABS., INC., REDONDO BEACH, CALIF.
Method and apparatus for measuring potentials in plasmas Patent
[NASA-CASE-XLE-00821] c25 N74-15650

AC logic flip-flop circuits Patent
[NASA-CASE-XGS-00823] c10 N71-15910

Apparatus for field strength measurement of a space vehicle Patent
[NASA-CASE-XLE-00820] c14 N71-16014

Hermetically sealed explosive release mechanism Patent
[NASA-CASE-XGS-00824] c15 N71-16078

Apparatus for measuring electric field strength on the surface of a model vehicle Patent
[NASA-CASE-XLE-02038] c09 N71-16086

Solar cell mounting Patent
[NASA-CASE-XNP-00826] c03 N71-20895

Prestressed refractory structure Patent
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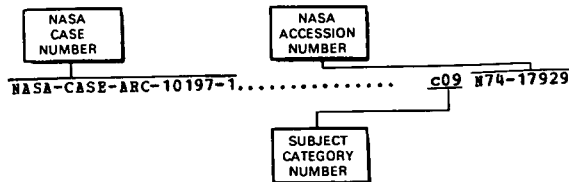
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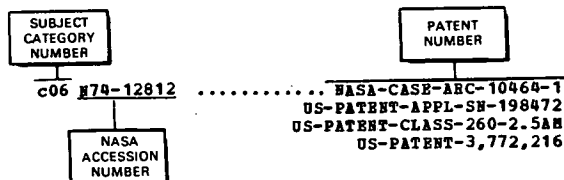
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Section 2

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